



3 WAYS HCI SPEEDS TIME-TO-VALUE OF YOUR HYBRID CLOUD

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Public, private or hybrid: what kind of cloud does your organization have? Just a few short years ago, you could probably identify just one — today it's not that simple.

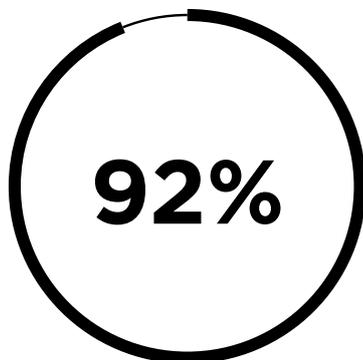


In fact, experts once thought that public clouds — Amazon, Google, Microsoft and the like — would make private clouds and the on-premises datacenter obsolete. Pundits believed the scale and ROI of moving everything to a public cloud would make any other type of infrastructure look outdated, and even foolish.

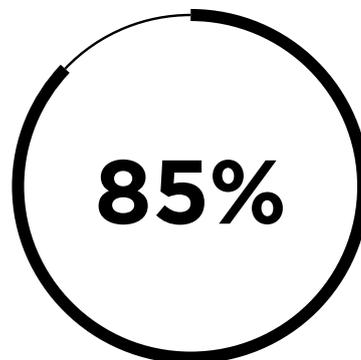
Turns out these predictions were a bit overzealous, as 92% of enterprises have a multi-cloud strategy, according to Flexera's 2021 State of the Cloud Report. To make things more complex, organizations still have on-premises workloads that are mission-critical, particularly in industries such as engineering, cybersecurity and life sciences, in which large, complex datasets and mathematical calculations are the norm. In fact, with the exception of a few (but growing number of) companies whose operations were always 100% cloud-based, most businesses use software and applications that can't easily be moved to a cloud environment or replaced with cloud-native alternatives.

Cost is another reason organizations may opt out of migrating applications to the public cloud. Although the public cloud provides flexibility and enables rapid deployment - which can be beneficial in terms of creating competitive advantage - on-premises deployments are typically more cost-effective, especially for steady-state and predictable workloads.

The reality is, nearly every organization operates with a mixture of on-premises, private cloud and public cloud resources, and 85% of enterprises think hybrid cloud is the ideal operating model. With workloads distributed across private and public environments, businesses are looking for ways to streamline and simplify management and operations, optimize their use of resources across clouds, and speed time-to-value for hybrid cloud environments.



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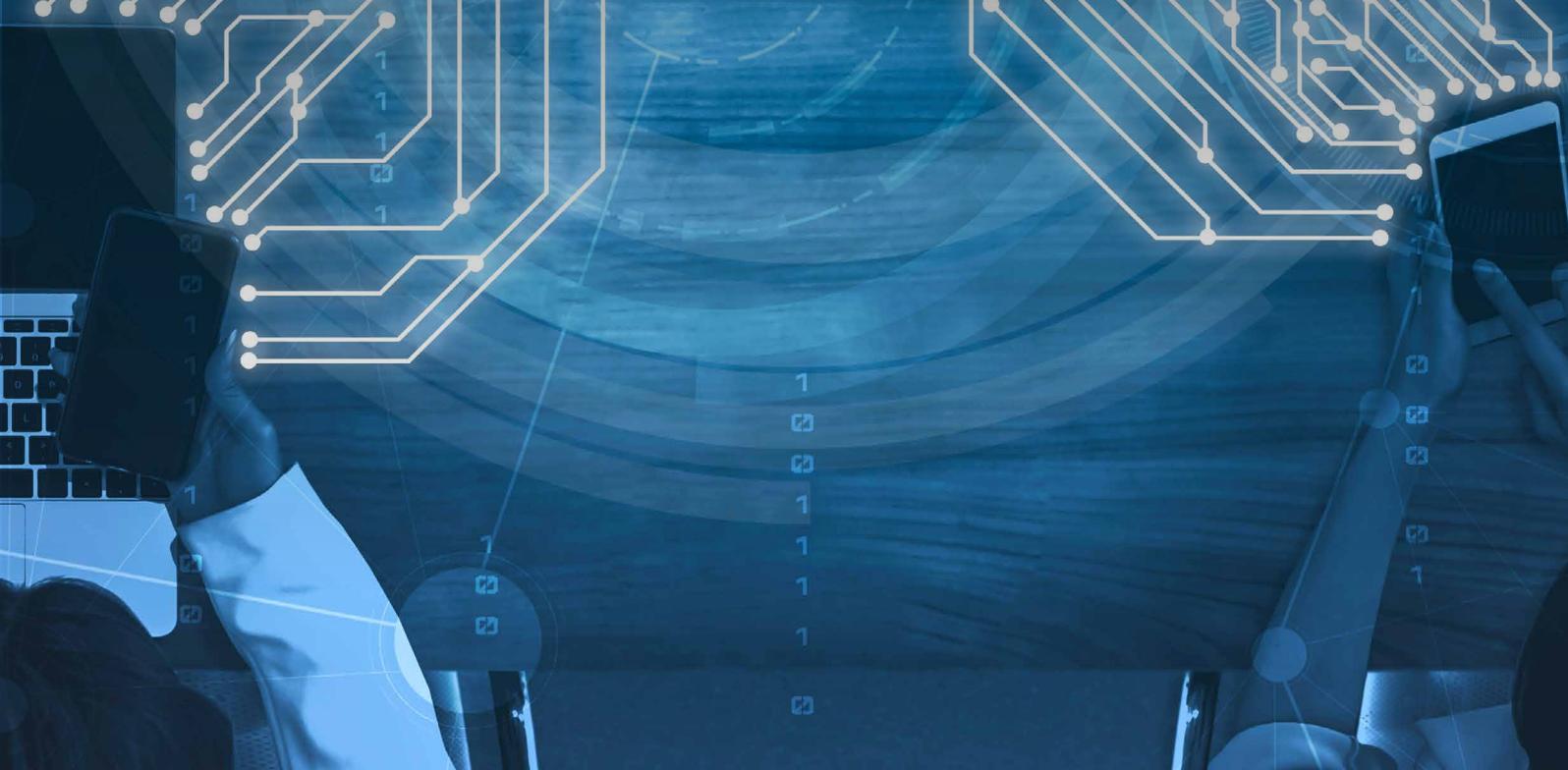
A Faster, Easier Path to Hybrid Cloud

Hyperconverged Infrastructure (HCI) entered the scene in 2012 as a way to reduce the complexity of traditional SAN-based environments by abstracting storage into a software-defined environment. It made it possible to dynamically allocate pools of storage resources to applications depending on demand.

But that was then; this is the cloud. While the public cloud provides ease of use, elasticity and cost-optimization, it can also drive up costs. VMs in the public cloud are often underutilized, and organizations end up wasting money on oversubscriptions, storage tiering and inactive instances. Running on bare-metal services in the public cloud, [HCI solves this problem](#) by enabling the sharing of unused resources and the ability to hibernate and resume resources when needed. The ROI dude, Steve Kaplan covers this in depth in his recent [DataCenter Knowledge article](#).



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But beyond resource optimization, [HCI 2.0](#) — the next generation of hyperconverged infrastructure — balances the capabilities of both private and public cloud. HCI 2.0 provides an easier path to hybrid cloud, enabling faster time-to-value by simplifying operations and management, ensuring business continuity, and paving the way for innovation. Here's how:

1) Simplifies operations and management: With multiple clouds — private and public — along with on-premises resources, management can become laborious, complex and costly. During implementation, a lack of automation leads to manual work in configuring platforms and migrating workloads. Many teams lack the necessary skills and expertise. In fact, [one study](#) found that a lack of resources and expertise was a major cloud challenge for 79% of enterprises. Managing different architectures with different tools is inefficient, and orchestrating the flow of data between clouds, cumbersome. It's also difficult to manage and predict capacity or control costs across platforms.

By unifying the management of all cloud and on-premises resources into a single console, HCI enables you to leverage the elasticity of the cloud along with the control and security of on-premises infrastructure, and manage it all centrally and efficiently. Public cloud instances can be turned on without rearchitecting applications or having to hire additional IT staff with specialized skill sets. VMs can be moved easily between clouds, as well, which frees organizations from the dependency on specific providers' APIs and tools.

2) Enables business continuity through self-healing: Access to business-critical data is essential for business continuity, but if an external SAN or network attached storage device fails, the VMs go offline. With HCI, data redundancy enables access to data, even in the case of host failures due to hardware problems, disasters

or user error. HCI recovers much faster from failure than traditional SAN storage, because the rebuild is distributed across the cluster. It abstracts all direct-attached storage and presents it as virtual storage, then replicates data across hosts. If one host fails, it's not disastrous. You can still get the data on the other hosts, while replicas are rebuilt, and the VMs are restarted automatically to maintain application and business continuity.

3) Paves the way for innovation: HCI enables IT teams to reduce hardware costs, simplify and centralize management, automate routine maintenance, and dynamically and strategically scale services — and that frees up massive amounts of time and money that can be reallocated toward innovation. If IT resources such as storage, compute and networking are needed to support development efforts, it's fast and easy to scale out to accommodate those needs. You can add capacity and increase performance as needed, then quickly and easily scale back as priorities change or as new initiatives emerge.

Nutanix research revealed that 87% of IT decision makers say that hybrid cloud has had a positive impact on their business. But many have yet to realize the full value of the hybrid cloud, because they struggle with deployment and management, limited resources or a lack of specialized skill sets. With HCI, all of those barriers disappear, and the full power of hybrid cloud is unleashed.

It's unlikely that datacenters are going anywhere any time soon, and as far as clouds go, the hybrid model is here to stay. Moving forward, organizations that adopt HCI will be able to extract maximum value from hybrid cloud environments faster, with less effort, risk and cost.



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