

Hyperconverged Infrastructures – 2020 Research Study Overview

When we conducted the first Evaluator Group study on Hyperconverged Infrastructures four years ago, HCI was still a solution chiefly for small and mid-sized companies. These companies loved how they could run every application they had on a single clustered infrastructure. Over the past three years, we have found something else out as well - enterprises want these same things.

Like it or not, and enterprises do, HCI is a good solution for most of the virtualized workloads that a company runs. There are some areas where enterprise IT is not adopting HCI, but that list keeps shrinking. In fact, when asked which workloads they would NOT put on HCI, the most common response this year and last was "None".

The Rule, not the Exception

Over these past 3 years, issues like maturity, stability and creating silos have diminished as enterprises are using HCI for databases and other mission critical applications. HCI is being used to replace existing infrastructure, 2-to-1 over new projects. Where HCI was once the exception in the enterprise, it has become the rule.

Enterprise IT has moved on from questions about *where* they could deploy HCI to questions about *where else* they can use it. Now they're asking about HCI for hybrid cloud, edge computing, backup, disaster recovery and Kubernetes.

In this year's study, we strove to compare the past results with currently collected data to show how things are changing in IT organizations. We asked what the drivers for their HCI projects are, which HCI products they bought or are evaluating and how they made their decision. And, we asked which workloads they put on HCI, which features they valued the most and what they wanted to see. Finally, we asked which workloads they would NOT put on HCI and what the overall drawbacks were to this technology.

Some of the Key Findings

- HCI has become a 'go to' infrastructure solution in the enterprise
- Neither price nor maturity are the top drawback to HCI
- Management functionality is now one of HCI's most important attributes
- vSAN and Nutanix are the HCI leaders, both as appliances and as software
- Resource inefficiency is still a purchase objection for HCI

Plus, results for the following:

- What are the most desired advanced features?
- How are Containers and Kubernetes used and for which applications?



- How pervasive is public cloud connectivity and for which applications?
 - How are HCIs being backed up?
 - How pervasive is Edge computing and for which applications?
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"Internally we want to simplify our work, we don't need to do our own integration. We would like to have something that is ready to use, to speed up our pace to the market".

- Cloud Service Provider

"Being a very large financial institution, that we're tied into the Fed, our movement to the cloud is pretty much controlled and regulated. 60-70% of our HCI infrastructure is in the local data center, so what we do is we implement private cloud."

- International bank

"[Improved] management, scalability, HCI makes a lot of sense - as long as the software works. That's one thing that [concerns] me about it is it's a piece of software".

- Large energy producer

Structure of the Research

Evaluator Group used multiple sources in the process of conducting research for this report. Development of questions for the survey and interviews was done independently and not sponsored by any outside firms. For this study, IT professionals were contacted and asked to share their experiences with HCI in their companies, including both those that had deployed an HCI solution and those that were evaluating or planning an evaluation. In addition to an email survey, in-depth interviews were conducted with about 10% of respondents selected from the survey. These open-ended discussions lasted 45 minutes to 1 hour and were designed to clarify the responses, achieve a deeper understanding of the data and uncover new insights where possible.

The data was drawn from 332 completed surveys, conducted over a 1-month period with U.S. and international companies. Vendors, VARs, press, and public relations (PR) firms were excluded from the survey results.

Specific demographics include:

- 75% of respondent companies had 1000 employees or more, the rest had 100-999 employees
- 79% of respondents were IT management or IT technical staff
- Respondent companies came from 15 industry segments with financial services, government, technology and manufacturing representing 50% of the total.



Who would benefit from this Research Study?

The research presented in this report is for the benefit of two types of consumers of this study:

- **Enterprise IT Architects:** This report will provide insight into how their peers are evaluating and using HCI technologies, including priorities and technology preferences.
- **Enterprise IT Vendors:** This report will provide insight into how IT end users are evaluating and deploying HCI technologies.

Vendors and Products Mentioned

Through the survey and interviews, multiple vendors were cited specifically. Vendors and products mentioned are listed below.

Cisco HyperFlex	DataCore HCI-Flex	Datrium DVX
Dell XC	Dell EMC PowerFlex	Dell EMC VxRail
HPE SimpliVity	Hitachi Vantara UCP HC	Lenovo ThinkAgile HX
Lenovo ThinkAgile NX	Microsoft Azure Stack HCI	NetApp HCI
Nutanix Enterprise Cloud Platform	Pivot3 HCI	Scale Computing
	VMware vSAN	



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