# **Industry Trends**

# 2016 State of Hyperconverged Infrastructure

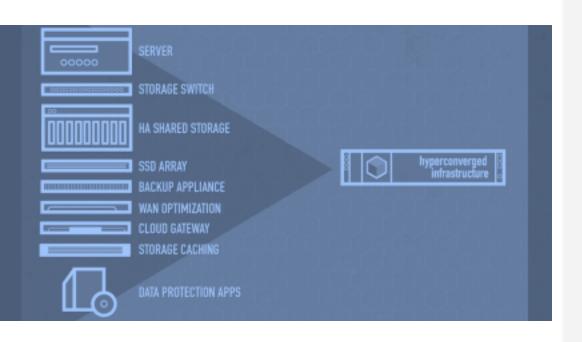
EMEA Insights | June 2016





### HYPERCONVERGED INFRASTRUCTURE

**Hyperconverged infrastructure** is a virtual computing infrastructure solution that seamlessly combines several data center services in an appliance form factor, which accelerates the speed and agility of deploying virtualized workloads, reduces complexity, improves operational efficiency, and lowers costs.



#### **Hyperconverged infrastructure** is characterized by:

- A software-centric design;
- Commodity x86 hardware components that combine hypervisor, compute, storage, and storage switching with other IT services in the stack, such as data protection, effectively eliminating the need for discrete IT components;
- A single "building block" appliance that, when combined with additional building blocks, provides a single, scalable resource pool, and seamlessly scales in capacity and performance;
- A high degree of automation;
- The ability to manage aggregated resources as efficiently as possible within and across data centers as a single federated system and through a common toolset;
- Design, delivery and support by a single vendor.











# EXECUTIVE SUMMARY & RESEARCH OBJECTIVES

#### **Executive Summary**

Hyperconverged infrastructure is gaining major traction and attention in both midmarket companies as well as the enterprise. For our 2016 EMEA Insights into this growing market, we learned the following:

- Adoption of hyperconverged infrastructure in some form is above 46% in EMEA compared to 27% in 2015;
- Cost reduction and operational improvements remain key decision criteria as it pertains to hyperconverged infrastructure adoption;
- Among EMEA-based planned adopters of hyperconverged infrastructure, improving operational efficiency and backup/recovery were identified as top needs; these are perfect problems to be solved by hyperconvergence;
- While those EMEA respondents investigating hyperconverged infrastructure believe they will need to focus on workloads that don't require end use SLAs, among those that have adopted, even mission-critical workloads are among those being deployed.

#### **Research Objectives**

For the second year, ActualTech Media and SimpliVity have partnered to research the hyperconverged infrastructure market to determine current state and to identify trends.

Specifically, with this project, we are attempting to:

- Determine the current penetration of hyperconverged infrastructure in organizations of different sizes:
- Identify any surprises that adopters of hyperconvergence may have encountered along their journey;
- Understand the key use cases and workloads that those implementing hyperconverged infrastructure are intending to support;
- Discover any outlier metrics that may reveal a portion of the market moving in an unexpected direction.







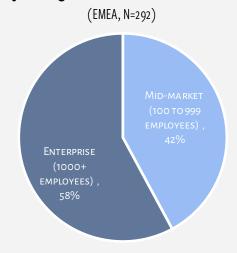




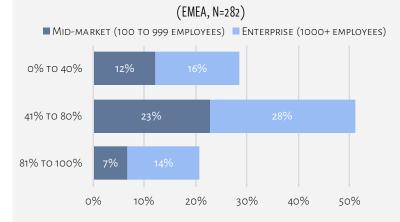
#### INTRODUCTION

ActualTech Media surveyed over 1,000 technology professionals and members of organizational management in order to gauge people's understanding of hyperconvergence, as well as how the market is adopting such solutions, with 292 total qualified respondents from companies based in EMEA—Europe, Middle East, and Africa. ActualTech Media also sought to understand how well expectations are meeting reality when it comes to hyperconverged infrastructure. The survey results represent midmarket (100 to 999 employees) and enterprise (1000 employees or more) companies. This report focuses on the subset of respondents whose company headquarters reside in EMEA.

# Approximately how many total employees does your organization have worldwide?



# Percent of x86 Systems Virtualized by Company Size









16

1

19

20

21

### **HYPERCONVERGENCE ADOPTION**

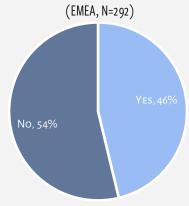
Since our 2015 report, hyperconverged infrastructure adoption has gone through an aggressive growth period. In EMEA, 46% of respondents indicate that they have adopted hyperconverged infrastructure in some way. In 2015, hyperconverged infrastructure adoption was just 27%.

In our assessment, we do not believe that this figure equates to full enterprise adoption. Rather, we believe that respondents are considering software-defined storage services provided by hypervisor vendors and hyperconverged software licenses that may ship with server hardware in their estimates. We also believe that converged systems may be included in these results. Further, we believe that many organizations may be testing hyperconverged infrastructure and, as a result, consider themselves as having adopted the technology.

The lower pie chart to the right provides a look at the same question, but from the full worldwide data set. For the world, hyperconverged adoption comes in at 37%, but with the same caveats.

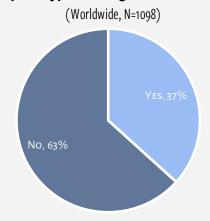
#### EMEA

# Based on the definition provided, have you already adopted hyperconverged infrastructure?



#### WORLDWIDE

# Based on the definition provided, have you already adopted hyperconverged infrastructure?



#### **TOP FIVE IT PRIORITIES**

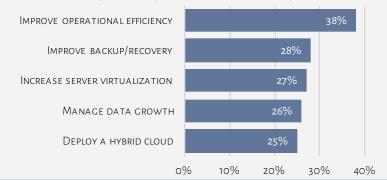
Topping the 2016 IT priorities list are activities intended to better manage IT resources and to reduce the cost and complexity of the data center. It appears as if organizations based in EMEA are seeking to truly streamline IT functions.

These priorities are all items that can be easily solved with the right hyperconverged infrastructure solution:

- Hyperconverged infrastructure is intended to simplify data center operations (38%), thereby improving operational efficiency.
- Improving backup and recovery capability (28%) is a key outcome desired by many respondents and is also a wellsupported use case for hyperconverged infrastructure.
- Twenty-seven percent of respondents say that they need to increase server virtualization. Later in this report, you will learn more about this need

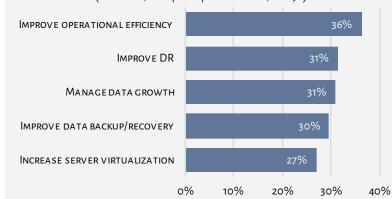
### Which of the following would you consider to be your organization's most important IT priorities over the next 12 to 18 months?

(EMEA, multiple responses allowed, N=292)



### Which of the following would you consider to be your organization's most important IT priorities over the next 12 to 18 months?

(Worldwide, multiple responses allowed, N=1098)



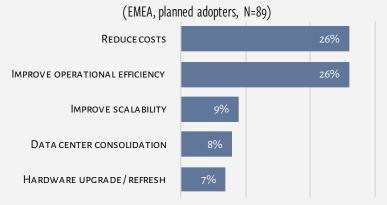
## TOP FIVE DEPLOYMENT DRIVERS

For those that are seeking to deploy hyperconverged infrastructure and for those that have already deployed hyperconverged infrastructure, the number one driver behind the initiative is to save money. Cost reduction (26%) was cited as the *primary* driver for those seeking to deploy hyperconverged infrastructure. For those that have already deployed the technology, cost reduction (28%) was also identified as one of the key drivers behind the decision.

Further, for those that are considering adoption, improving operational efficiency tied cost reduction at 26%. Operational efficiency can be considered a form of indirect cost reduction, but, more importantly, can also be considered a strategic investment enabling IT to pivot its support toward more revenue-driving functions as it turns away from constant infrastructure support.

From there, driver interests plummeted into the single digits with respondents saying that they want better scalability (9%).

#### Which of the following is the primary driver for your interest in hyperconverged infrastructure?



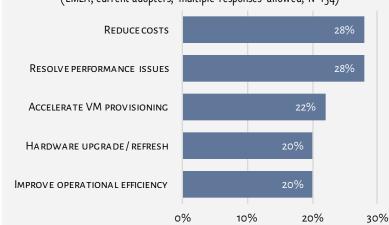
10%

20%

30%

#### Which of the following were the original primary drivers for deploying hyperconverged infrastructure?

(EMEA, current adopters, multiple responses allowed, N=134)











### WHO IS ADOPTING HYPERCONVERGENCE?

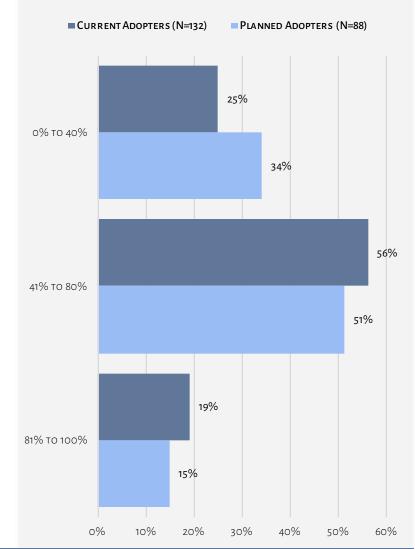
#### Organizations With Lower Levels of Virtualization

The question that comes to mind is simple: who is adopting hyperconverged infrastructure? Our data reveals that there are a number of different factors at play, with some being not so obvious.

One area that stuck out particularly for our EMEA respondents was the fact that planned adopters have lower levels of virtualization than current adopters. In fact, 34% of planned adopters say they are less than 40% virtualized while only 25% of current adopters say the same.

You learned on page 6 that, among EMEA respondents, increasing server virtualization is the third most important priority for IT. The results here back up this priority. With low levels of virtualization, it makes sense that it would be a priority to increase this number.

# Percent of x86 Servers Virtualized By Current Adopters vs. Planned Adopters



### WHO IS ADOPTING HYPERCONVERGENCE?

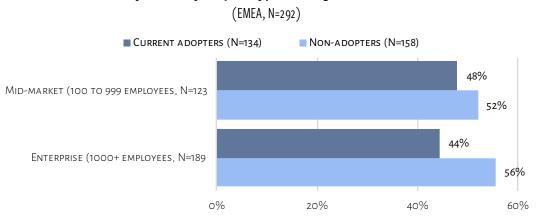
#### Organizations with a Lot of Servers

Those organizations in the EMEA region operating with more than 100 servers were far more likely to be operating hyperconverged infrastructure environments.

#### The Role of Company Size

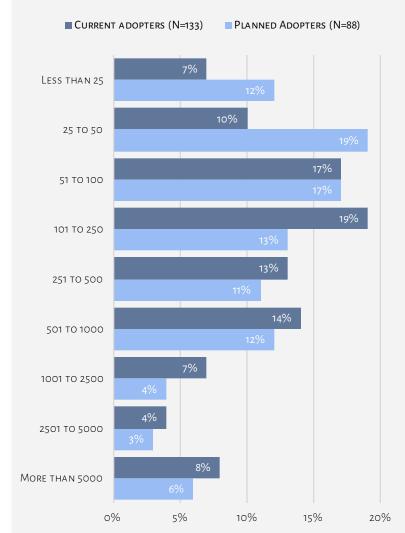
Hyperconvergence is sometimes thought of as a big company technology, but that also does not appear to be the case, as you can see in the figure below. Smaller companies – those in the midmarket – are almost as likely to have undertaken deployments.

### Have you already adopted hyperconverged infrastructure?



### Approximately how many production servers (physical or virtual) are supported worldwide by your IT organization?

(EMEA, N=221)



### WHO IS ADOPTING HYPERCONVERGENCE?

#### Those Seeking Efficiency and Better Backup

Among EMEA-based planned adopters of hyperconverged infrastructure, it's clear that there is a need for improving operational efficiency (43%) as well as backup/recovery (39%).

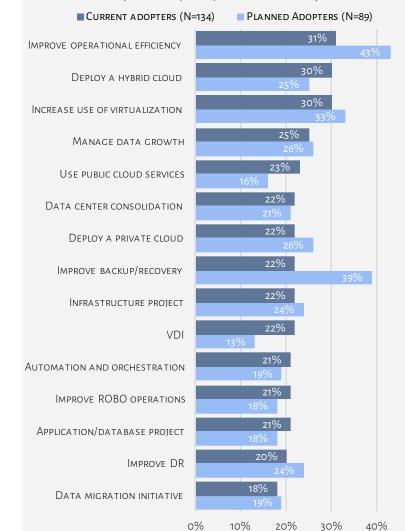
Among current adopters, improving operational efficiency is still the primary IT priority, but is only cited by 31% of respondents. In other words, those that are considering hyperconverged infrastructure are far more challenged efficiency-wise than those that have already adopted.

Similarly, while 39% of planned adopters say that backup and recovery needs to be improved, only 22% of current adopters make the same statement. For a great many HCl adopters, backup and recovery has been solved.

Interestingly, for VDI, only 13% of planned adopters say that this is a key priority while 22% of current adopters say the same. For planned adopters, while VDI may not be a critical consideration, among adopters, hyperconverged infrastructure is proving to be more than suitable.

#### Analysis of IT priorities broken down by current adopters and planned adopters of hyperconverged infrastructure

(EMEA, Multiple Responses Allowed, N=223)







### TOP FIVE PURCHASE CRITERIA

At 29 respondents, 2015's EMEA current adopter sample size was very small, particularly compared with the 134 from 2016. As such, we won't focus on specific percentages here, but will look at the ranked order of criteria.

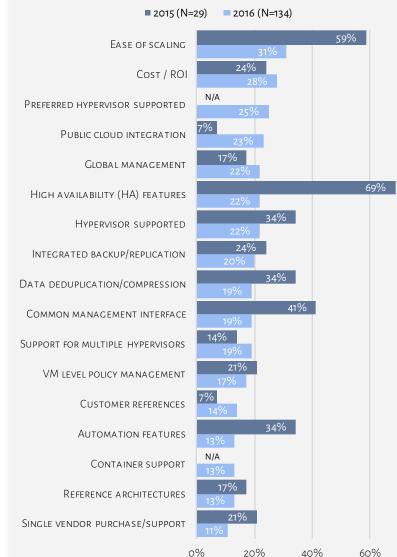
In 2015, current adopters rated high availability as their top consideration. For 2016, this item fell to sixth place. Instead, direct cost of the solution was the top consideration.

Why the big drop? Simply put, with more education, people adopting hyperconverged infrastructure know and expect high availability as a basic part of a solution and do not focus on it. Instead, they look at operational criteria as far more important.

Please note that two new items were added to the 2016 criteria list – preferred hypervisor and container support were not present in the 2015 options and are listed as N/A in the chart to the right.

#### Which are your most important criteria in evaluating a hyperconverged infrastructure solution?

(EMEA, current adopters)











#### WORKLOADS

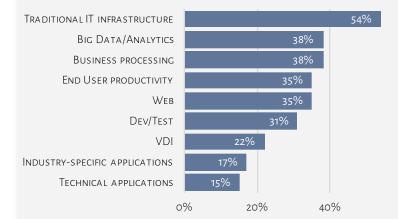
Hyperconverged infrastructure has the potential to help EMEA-based organizations rethink how they support their workloads. In the charts on this page, you can see that there are a number of differences in what kinds of workloads are running in hyperconverged infrastructure environments and those adopters are considering running on the technology.

Those considering hyperconverged are focused on dipping their toes in the water by focusing on IT-managed applications that don't require negotiated SLAs with business units. However, once they've adopted the technology, they're discovering that there is nothing to worry about. Hyperconverged infrastructure can capably support even the most demanding analytics and business processing workloads.

Don't write off VDI, though. We are still seeing a focus on VDI with hyperconvergence, but IT pros are simply placing other mission-critical workloads ahead of it

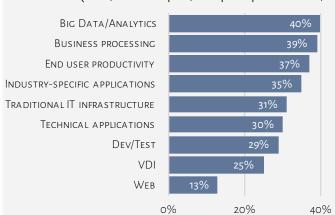
#### Which workloads do you plan to support with hyperconverged infrastructure?

(EMEA, planned adopters, multiple responses allowed, N=89)



#### Which workloads are you supporting with hyperconverged infrastructure?

(EMEA, current adopters, multiple responses allowed, N=134)







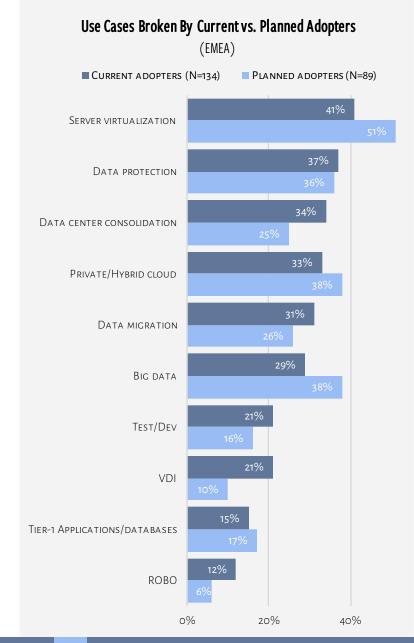


#### **USE CASES**

For those considering hyperconverged infrastructure, it's no surprise to see support for the server virtualization use case at the top of the list, particularly given the low levels of server virtualization that we observed among EMEA respondents and that we reported on earlier in this ebook.

Beyond that basic use case, data protection remains a critical use case for both planned and current EMEA adopters. That said, among planned adopters, data protection is in fourth place behind big data and private/hybrid cloud initiatives. Among current adopters, there is a discovery that hyperconverged infrastructure solutions are adept at providing data protection capabilities are the second place use cases among these respondents.

VDI is sometimes considered a secondary use case and may not be top of mind among planned adopters at 10%. However, among current adopters, 21% of respondents are supporting this use case, and that is expected to grow.







### Hyperconverged Infrastructure Benefits

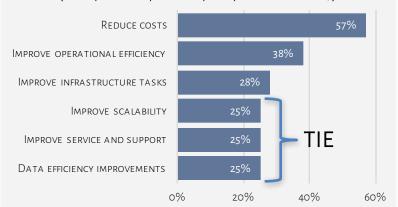
Cost savings—including improving operational efficiency (49%) – is the key benefit that respondents are seeking as they journey down the hyperconverged infrastructure path. The real question is this: do cost savings actually emerge after a hyperconverged infrastructure deployment?

For those that have actually deployed the technology, a full 38% — the top ranked experienced benefit—say that they have, in fact, reduced costs.

However, while 49% of those considering a solution are seeking improved operational efficiency, only 26% of those that have deployed acknowledge that goal as achieved. But looking at the list a bit more reveals the fact that 26% also identified the ability to strategically redeploy IT staff to business-facing projects as a realized benefit. Operational efficiency is often 1) cost savings and 2) staff time savings. Here, respondents were very intentional in identifying that both outcomes were achieved.

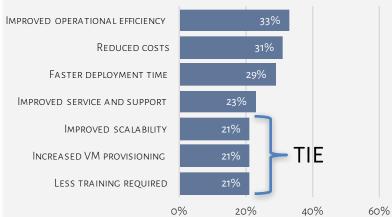
#### Which are the most important benefits you expect to realize by deploying hyperconverged infrastructure?

(EMEA, planned adopters, multiple responses allowed, N=89)



#### Which of the following are the top benefits you realized by deploying hyperconverged infrastructure?

(EMEA, adopters, multiple responses allowed, N=134)





### **NECESSARY OUTCOMES**

In all business decisions, there are necessary outcomes that must be achieved. When comparing ranked outcomes between worldwide respondents and those in EMEA

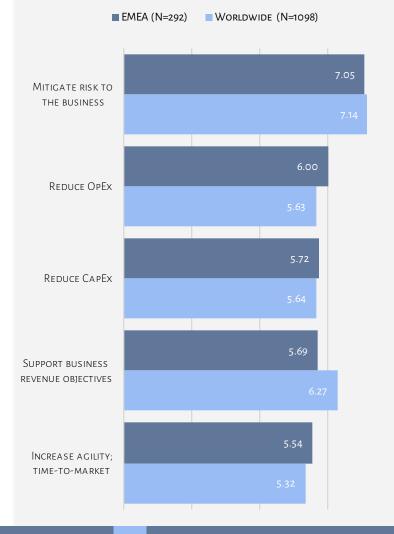
We asked respondents to share with us their goals in IT. Respondents, by a large margin, are looking for ways to mitigate the risk to the business (7.05 out of 10). For EMEA, the second-most important objective for IT is to use IT to reduce OpEx whereas the general worldwide second place is to support business revenue objectives. For both EMEA and worldwide respondents, finances are second to risk mitigation.

The same goes for the third place business outcome, which is to reduce CapEx. Both EMEA and worldwide respondents rank this objective third.

Hyperconverged infrastructure is uniquely suited to helping these organizations satisfy these outcomes.

## For the following business outcomes that can be achieved through IT, rank them in the order of importance to your organization

(EMEA vs. Worldwide)







## **NON-ADOPTERS: LACK OF INTEREST**

In 2016, there remains a percentage of respondents that have no interest in considering adoption of hyperconverged infrastructure. For a variety of reasons, this technology is not a fit for their organization.

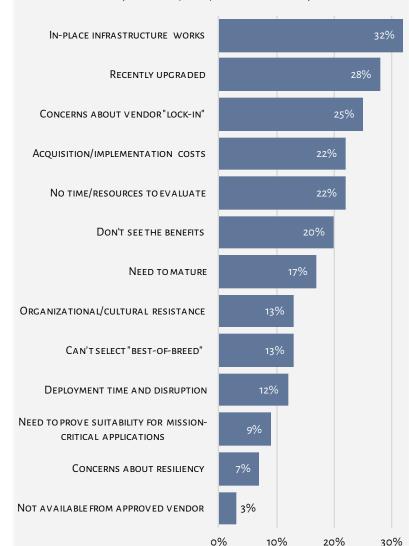
By a significant margin, the most commonly cited reason (38%) is that the in-place infrastructure works just fine. An additional 17% of respondents say that they have recently upgraded their infrastructure and do not need hyperconvergence at present.

There are also some respondents that have concerns around the perceived costs associated with hyperconverged infrastructure. We would urge these respondents to consider the full cost of current systems before discounting hyperconvergence as too expensive.

Finally, there are others that work in companies that are just set in their ways and that won't make such a major change anytime soon.

#### Which are the primary reasons you have no interest in deploying hyperconverged infrastructure in the near term?

(EMEA, multiple responses allowed, N=69)







## THE HYPERVISOR QUESTION

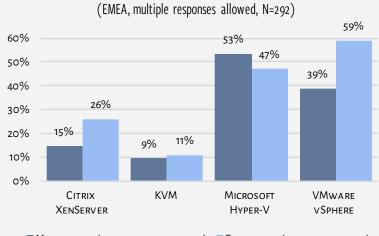
Microsoft Hyper-V is gaining ground on VMware's vSphere in the EMEA region and, among smaller companies, it's eclipsing VMware vSphere. There's no other way to interpret the information in our survey.

We were quite surprised by the results. While it's been known that market dynamics have been shifting away from VMware, we were stunned at the severity of the results. Today, 59% of large companies in EMEA say they use vSphere, a number than is expected to drop to only 58% in the next 12 to 18 months. However, among midmarket organizations, VMware has just 39% of the market compare to a whopping 46% of the market for Hyper-V.

In addition, continuing a trend that has been going on for years, Citrix XenServer share of the market will continue to slide among both midmarket and enterprise companies.

This was a multi-select question, so respondents were asked to select all of the hypervisors they have in use today and the ones they plan to use over the next 12 to 18 months.

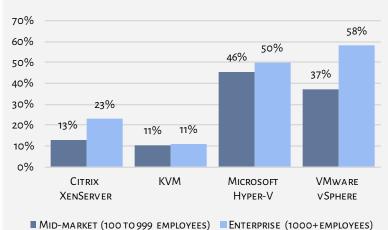
#### Hypervisor(s) currently in use



■MID-MARKET (100 TO 999 EMPLOYEES) ■ENTERPRISE (1000+EMPLOYEES)

#### Hypervisor(s) planned for use in 12 to 18 months?

(EMEA, multiple responses allowed, N=292)



www.ActualTechMedia.com 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

### **KEY TAKEAWAYS**

- Hyperconverged infrastructure is going mainstream in multiple ways. First, we are seeing many more organizations actually adopt hyperconvergence in some way. However, what is equally important is the fact that the technology is now being used to support far more general business workloads than ever before.
- In EMEA, those with lower levels of virtualization are seeking hyperconverged infrastructure solutions and have prioritized server virtualization as an IT initiative.
- While cost of a solution is a top concern for those considering hyperconverged infrastructure, for those that have actually deployed, they indicated that they were far more focused on workload support than cost and identified high availability and data reduction were more important criteria than cost.

- Inertia is a powerful force. Among those that indicate a lack of interest in hyperconverged infrastructure, the most cited reason is that the existing environment works just fine or was recently upgraded.
- 22% of non adopters also have concerns around the deployment cost of hyperconverged infrastructure.
- Compared to 2015 EMEA results, hyperconverged infrastructure deployment has increased by over 70%, rising from 27% to 46%.
- Respondents in the EMEA region are far more likely to have deployed hyperconverged infrastructure when compared with worldwide respondents.





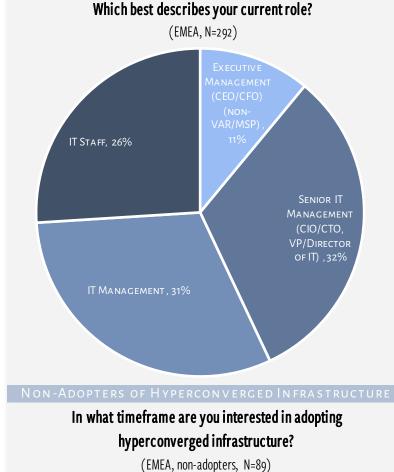


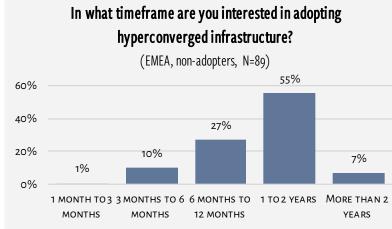
## **NEXT STEPS & DEMOGRAPHICS**

For those considering hyperconverged infrastructure, 44% plan to do so within the next 12 months, 51% in the next 1 to 2 years, and 5% more than 2 years out. For those companies deploying in the next year, the time is now to begin planning on how you intend to accomplish a migration and to begin studying the potential positive impact that the migration will have on IT.

Start to consider vendor options and seek vendors that have products that align to your needs and goals. And, make sure to really look at the market! Don't just surge forward with "name brand A" because you know it. You may end up leaving a great option behind.

If you're seeking even more information about the current state of hyperconverged infrastructure, stay tuned to www.hyperconvered.org as ActualTech Media releases EMEAfocused results as well as a full, in-depth worldwide report.





## SURVEY METHODOLOGY AND CRITERIA

#### **Survey Methodology**

ActualTech Media collaborated with SimpliVity to craft survey questions that we felt would reveal interesting aspects of the burgeoning hyperconverged infrastructure market. Through a combination of direct email campaigns and the creation of formal survey panels, we gathered survey responses from over 1,000 individuals around the globe.

Although we did not actively deny survey participation to those in organizations with fewer than 100 employees, responses from those very small organizations have been filtered out in the final analysis.

For company size segments, we have grouped company sizes into categories representing the midmarket (fewer than 1000 employees) and enterprise (1000 or more employees).

#### **Qualification Criteria**

In order to qualify for this survey, respondents were required to have knowledge of their organization's IT strategy. Further, there were two "pathways" in the survey: one for end users and one for VARs and service providers. Each respondent set had individual questions.

## ABOUT SIMPLIVITY & ACTUAL TECH MEDIA

#### **SimpliVity**

SimpliVity hyperconverged infrastructure delivers the enterprise-class performance, protection, and resiliency today's IT leaders require, with the cloud economics businesses demand. Only SimpliVity delivers convergence that goes beyond compute, storage networking, and storage to integrate all IT infrastructure and data services, including built-in data protection, below the hypervisor. SimpliVity's hyperconverged infrastructure reduces IT costs and streamlines operations with up to 3x TCO savings compared to legacy infrastructure and cloud alternatives; improves agility and time to production; and improves recovery objectives while eliminating the use of legacy data protection tools. SimpliVity customers include thousands of enterprises around the world, including mid-sized organizations and the Global 2000.

Learn more about SimpliVity at www.SimpliVity.com

#### **ActualTech Media**

ActualTech Media is comprised of well-known authors, analysts, and speakers with considerable depth and breadth of technical and IT leadership expertise. The company produces custom content assets aimed at educating IT buyers. To that end, ActualTech Media developed hyperconverged.org.

ActualTech Media and hyperconverged.org's mission is to help IT professionals understand the world of hyperconvergence. From time to time, the company conducts surveys designed to gather information about IT priorities, purchase criteria for new data center architectures, such as hyperconverged infrastructure. Its reports can inform your data center strategy.

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