

#### AT A GLANCE

The digital economy is putting pressure on IT to deliver apps and services fast. With hyper-converged infrastructure (HCI), organizations can achieve greater agility, reduce TCO, and build a future-ready foundation for whatever lies ahead.

In many enterprises, IT professionals spend 70% of their time dealing with operations issues rather than focusing on more strategic projects.<sup>2</sup>

# Agility Is Key in the Digital Economy

As digital transformation gains momentum, IT must deliver apps and services faster than ever before. Problem is, many IT environments aren't equipped to deliver the responsiveness that business demands. That's because traditional infrastructure is often siloed, requiring multiple resources to manage effectively. The hardware-centric solutions of yesterday simply can't keep up with today's expectations for speed, performance, and agility.

IT needs an infrastructure that can support traditional as well as new apps and technologies in a multi-cloud era.

Let's take a closer look at the issues businesses are facing—and why they can't be solved with traditional solutions.

## Infrastructure Challenges Hold Organizations Back

Traditional infrastructure, typically provisioned on a project-by-project basis, is built on inefficient purpose-built hardware that consumes valuable time and resources. IT teams get caught up in repetitive, manual tasks, leaving no time for the innovation their organizations so desperately need.

This outdated approach leads to a number of challenges:

- Operational complexity and stretched resources slow IT down. Heterogeneous environments, siloed infrastructure, and fragmented management software hinder agility and slow response times. Overprovisioning and guesswork make it difficult to accurately and effectively deliver on enterprise service-level agreements.
- Budget and investment constraints limit options. Most IT budgets are static or shrinking, which puts IT in a hard place. They want to keep up with the demands, but have limited resources to do so. Those with hardware-centric infrastructure spend nearly twice as much time trying to complete new projects.1
- Pressure to support the latest apps, hardware, and cloud technologies is growing. Traditional infrastructure limits IT's ability to adopt newer hardware solutions and next-generation applications, and don't provide a natural path to the public cloud. This can cause a loss of competitive advantage, as competitors adopt faster, more affordable solutions.

<sup>1</sup> Based on VMware estimates derived from actual mid-market customer deployments with 100-300 VMs

<sup>2</sup> Reviewing the Current State of Hyperconvergence and Real World Benefits of VMware Virtual SAN Deployments, IDC, July 2016

Hyper-converged systems are projected to grow 64% between 2015 and 20193.

"In a hyper-converged model, all the teams started to learn each other's roles... We could focus on things outside of just keeping the lights on."

JOEL VENGCO BAYSTATE HEALTH

## 65%

of enterprises cited improved agility and flexibility as the top benefit of software-defined infrastructure4.

## The Future Is Hyper-Converged

In a hyper-converged infrastructure (HCI), compute, storage, and networking are tightly integrated on industry-standard x86 servers, enabling a building-block approach to a modern, software-defined data center (SDDC). With HCI, all key data center functions run as software on the hypervisor in a tightly integrated software layer.

Three main components make up a complete HCI solution:

- 1. Compute virtualization enables consolidation and better utilization of the underlying infrastructure while simplifying management, increasing agility and minimizing downtime. This results in a reduction in both CapEx and OpEx.
- 2. Storage virtualization reduces storage hardware costs and delivers a dynamic, agile, and automated approach to storage that aligns to business and application needs.
- 3. Network virtualization transforms the network operational model by attaching network and security services to the workload, bringing flexibility and automation to the network layer.

It's important to note that while HCI can be implemented as an all-in-one solution, it doesn't have to happen all at once. Depending on your business needs and budget constraints, you can virtualize compute and storage first and then virtualize networking later.

In addition, intelligent operations management helps maximize the return on HCI investments. It delivers proactive performance monitoring and troubleshooting, insight into costs as well as workload placement, capacity management and planning across infrastructure and applications.

## HCI Provides a Path to a Modern Infrastructure

With HCI, you can reduce or eliminate the use of traditional, hardware-centric approaches to compute, storage, and networking. Unified operations management across all three data center functions streamlines operations, accelerates decision making and maximizes uptime and utilization.

And once all key data center functions are running in software, you can achieve the speed you need to get and stay ahead in the fast-paced digital economy of today—and tomorrow.

#### **Boost agility**

- Deliver IT services and SLAs efficiently, reliably, and on-demand
- Simplify operations and lifecycle management
- Converge processes, teams, and tools

## **Reduce TCO**

- Reduce acquisition, as well as ongoing scaling and maintenance costs by shifting to simplified hardware architectures and server economics
- Leverage existing skill sets and tools while getting the most out of existing hardware and software infrastructure investments
- Minimize disruption and avoid custom integration costs by seamlessly integrating with third-party services, solutions, and vendors of choice

<sup>3</sup> IDC Hyper-converged Systems 2015-2019 Forecast, February 2016

<sup>4 451</sup> Research Voice of Enterprise Q4 2015

#### **Evolve with Less Risk**

- Run and manage apps across clouds while effectively managing the availability, security, and performance of IT services across multi-cloud environments
- Future-proof your infrastructure for next-gen apps and hardware advancements
- Maintain flexibility in the future with a vendor that provides access to a broad ecosystem of solutions

## Prepare For the Future with a Modernized Infrastructure

For businesses to remain competitive, IT needs a modern infrastructure that leverages the power and efficiency of virtualization across all components of the data center—compute, storage, and networking—with common management across all three.

As the leader in virtualization technology, VMware delivers proven solutions that help businesses move forward with confidence. With VMware, you can evolve at the speed of business by boosting your agility and spending more time on innovation<sup>5</sup>, while getting the most out of your existing investments.

To eliminate the complexity of IT by leveraging new technologies and our unique expertise; to provide integral value and support for your organization, and to assure our client's success by delivering high quality IT Managed Services and

### PREPARE FOR THE FUTURE WITH VMWARE

Learn more about modernizing your infrastructure > Try it yourself in a Hands-On Lab >

For more information contact: Plexeon Sales info@plexeon.com 203.321.1283 www.plexeon.com

5 IDC Hyper-converged Systems 2015-2019 Forecast, February 2016



**CUSTOMER SUCCESS: CH2M** 

in field sites and simplified central

Global engineering firm CH2M eliminated 100% of day-to-day storage management

operations. The company achieved linear

scalability with a common HCI that will

easily expand to meet future needs.

