

# Data Center Infrastructure Is on the Cusp of Change

In the digital economy, new business models are emerging and business demands are increasing, which puts pressure on IT to keep up. The ability to deliver applications faster while building a solid cloud strategy is no longer a nice-to-have, but a must-have for businesses that want to stay competitive by meeting customer needs.

Compute or server virtualization transformed the industry, delivering unprecedented efficiencies and cost savings.

But that transformation isn't complete. Many IT teams still rely on hardware-centric approaches to storage and networking, which are expensive and time-consuming to manage and maintain, and don't provide the flexibility and agility that today's users demand.

In an era where speed and performance are critical, moving to a software-centric approach in every area of the data center is the only way to get ahead.

Now is the time to modernize the infrastructure across compute, storage, and networking — with common management across all three.



### What Is a Modern Infrastructure?

A modern infrastructure leverages the power and efficiency of virtualization across the data center, virtualizing compute, storage, and networking, with common management across all three.

The VMware approach to modern infrastructure is based on hyper-converged infrastructure (HCI), which brings compute, storage, and networking together on industry-standard x86 servers. The result is cost-effective, highly scalable building blocks for the software-defined data center (SDDC).

### VMware solutions for modern infrastructure allow you to:



#### **Evolve Without Risk.**

Seamlessly extend virtualization to storage with an integrated hyper-converged solution that simply works with your overall VMware environment. Existing tools, skill sets, and solutions reduce your risk, while the large, proven ecosystem of VMware partners eliminates hardware lock-in and provides access to the broadest choice of server vendors.



#### Lower TCO.

Lower total cost of ownership by 50%¹ or more. Software-defined storage leverages server-side economics and affordable flash technologies. Trim OpEx with fully automated installation, configuration, provisioning, and lifecycle management for the entire infrastructure stack. Add intelligent operations to proactively manage performance, capacity, and costs while enforcing standards.

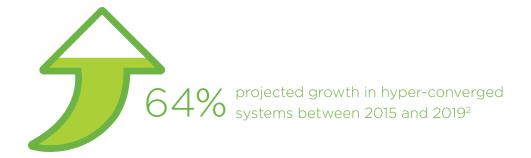


#### Scale to Tomorrow.

Prepare for tomorrow's dynamic business in the multi-cloud era with a solution that uses the latest storage and server technologies and supports a wide range of applications, from business-critical apps to next-gen apps using containers. A common storage platform and intelligent operations for on- and off-premises applications provides a steppingstone to the cloud.

## Why More Organizations Are Modernizing Their Infrastructure

Companies across industries are adopting modern infrastructure as a fundamental part of their journey toward the SDDC. Many are choosing hyper-converged systems as a building block.



#### Here's how HCI helps IT modernize the infrastructure:

- •It's a simple, highly efficient solution that's flexible enough to adapt to technology changes
- It removes silos that keep functions separated in hardware-centric infrastructure
- It provides the ability to deliver storage on-demand, without overprovisioning
- •It creates a foundation that lets you evolve toward the SDDC at your own pace

### Take the Path That Matches Your Needs

VMware provides two paths you can take to modernize your infrastructure in a way that best matches the needs of your business.

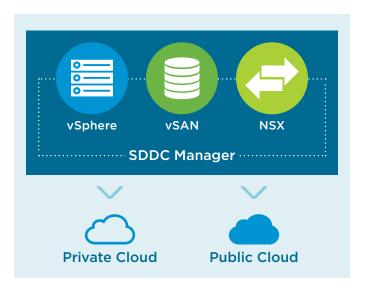
#### 1. Deploy an Integrated Infrastructure Platform

VMware Cloud Foundation delivers a unified SDDC infrastructure platform for the hybrid cloud. It provides a natively integrated stack of compute, storage, and networking that consists of VMware vSphere, VMware vSAN, and VMware NSX. It offers built-in lifecycle management that simplifies operations across the entire infrastructure stack, from installation and configuration to provisioning and patching. This comprehensive platform ensures the highest levels of consistency, agility, and security.

### 2. Deploy Individual Components

With VMware vSphere® as a foundation, you can take an evolutionary approach to modern infrastructure, starting with VMware vSAN.™ As your needs grow, you can layer VMware NSX® on top for network elasticity and enhanced security through micro-segmentation. You gain benefits at every step along the way. VMware delivers a proven ecosystem of software solutions, and supports all leading server vendors to eliminate hardware lock-in. Take advantage of your preferred server platform(s) without the risk and challenges of implementing a new hardware solution.

No matter which path you adopt, you can maximize your return on investment with a unified platform to manage performance, availability, capacity and the costs of IT services.



### Results You Can Count On

Whether you choose an integrated solution or deploy individual components, VMware can help you modernize your infrastructure and realize:

#### Significant cost savings

The Taneja Group conducted a study of VMware Cloud Foundation and found that it delivers 45 percent lower 3-year TCO than alternative traditional 3-tier approaches<sup>3</sup>

### Better performance

Natively integrated vSAN provides 2-5x CPU and memory efficiency and helps increase VM density

#### • A broad range of deployment options

The VMware ecosystem provides 5x more hardware deployment options than any other HCI solution, with more than 200 vSAN Ready Nodes<sup>4</sup>

#### Streamlined and automated operations

A Forrester TEI study<sup>5</sup> shows organizations increased operational efficiency by 20 percent and reduced unplanned downtime by 75 percent with intelligent operations powered by VMware vRealize Suite.

<sup>3.</sup> Taneja Group, "For Lowest TCO and Maximum Agility Choose the VMware Cloud Foundation Hybrid SDDC Platform." October 2016, http://tanejagroup.com/profiles-reports/request/for-lowest-tco-and-maximum-agility-choose-vmware-cloud-foundation-the-sddc#.WIFi57GZNE4

<sup>4.</sup>VMware Analysis, 5x More hardware choice based on comparison of approved platforms on http://vsanreadynode.vmware.com/RN/RN and https://www.nutanix.com/products/hardware-platforms/, Nov 2016

<sup>5</sup> Forrester Total Economic Impact Study, "The Total Economic Impact™ Of vRealize Intelligent Operations - Cost Savings and Business Benefits Enabled By VMware's Cloud Management Platform." Nov 2016

## The Time is Now to Modernize Your Infrastructure

VMware and Intel enable IT organizations to realize a digital transformation and deliver IT infrastructure and application services with the speed and agility to support business innovation and growth while optimizing TCO and improving resource utilization. VMware's software-defined HCI architecture and Intel® technology integrate compute, network, and storage virtualization technologies and enable businesses to modernize their infrastructure, automate IT, and run modern applications.

#### PREPARE FOR THE FUTURE WITH VMWARE

Learn more about modernizing your infrastructure > Take a test drive in a Hands-on Lab today >

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