



VMware: Laying the Foundation for a Multi-Cloud World

Accelerating the Move to
Hyperconverged Infrastructure

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In this eBook:

Digital transformation is reshaping how business gets done. The impact is felt from the data center to the customer. For a successful transformation, it's imperative to adopt a true hybrid cloud model.

In this eBook from VMware and Intel®, you'll learn:

- What's driving the movement to modernize legacy data centers
- Why hyperconverged infrastructure is the best choice for a true hybrid cloud
- How VMware's vSAN, together with Intel technologies, can evolve your data center into a hyperconverged powerhouse for digital transformation
- The next steps for building your hybrid cloud

Selling sofas is big business. Just ask [DFS](#), the UK's leading upholstery retailer. The company has seen tremendous growth in its online and mobile sales, putting a focus on the technology that powers the customer experience. Factor in the seasonal spikes in demand with the online growth, and it's clear why [IT leaders at DFS](#) set out to transform their infrastructure to create a seamless customer experience.

"We've been in a transformation journey for the last few years, and the scalability of our solutions is really important for us," says Russell Harte, CIO of DFS. "The reason we've moved to a more multicloud environment is that we're simply trying to find the best-fit solution we possibly can for the applications we're running," he says. "We want to make sure the customer experience is always underpinned by world-class technology."

Business and IT leaders are facing an urgent mandate: become a digital organization or risk falling behind the competition. Consider: IDC predicts that by 2019, demand for digital-related services such as mobile apps or self-service portals will comprise more than [70% of all external services growth](#). And by 2020, digital transformation spending will reach \$2 trillion.

Call it the [Third Platform](#) or the [Fourth Industrial Revolution](#), the emergence of cloud computing, big data analytics, and mobility has upended business as usual. At the same time, the virtualized model of hardware, software, and management, operated as a single converged software-defined data center, has become an enabling technology for digital transformation.

For many, the digital transformation journey has led them to consider hyperconverged infrastructure (HCI), a strategy that tightly integrates virtualized compute, storage, and networking resources along with a management layer on standard server hardware.

Legacy Challenges

Each digital transformation journey is unique, but the most common obstacle is that traditional three-tier architecture can no longer keep pace with digital business. As a result, organizations face multiple business risks from legacy infrastructure, including costs, agility, and security.



Escalating costs—Legacy infrastructure is expensive. Between the high up-front costs and continued maintenance costs, organizations have a massive investment in their infrastructure. In the healthcare industry, a recent study found that 81% of IT budgets went to just maintaining infrastructure,¹ stifling investment.



Reduced business agility—Legacy infrastructure is purpose-built, is unable to adapt to new use cases, and isn't an ideal fit for modern scale-out applications. In response, businesses must maintain specialized IT staff to perform cumbersome manual processes. IT staff can't be quickly reassigned as new initiatives arise, and the high cost to maintain these processes and staff utilizes budget that could be used for innovation.



Increased security risks—Cyberattacks are on the rise, and legacy infrastructure is often the target. Highly manual lifecycle management often leaves hardware exposed to attack. Cyberattacks cost businesses billions of dollars and do extensive damage to their brand.

Trying to make siloed legacy systems work with new technologies adds another layer of complexity, time, and costs. Given the choice of where to invest, IT decision-makers are increasingly investing in the future: a flexible, on-demand, virtual, cloud-enabled infrastructure.

Moving Toward a True Hybrid Cloud

The digital revolution is changing retail, even traditionally high-touch retail such as furniture—just ask DFS. In just a few years, web traffic has exploded, as more customers have moved to shopping online. DFS needed burst capacity for holiday sales as well as increased agility to rapidly develop new applications to accommodate web-based sales. Although the public cloud seemed like a fit, DFS wanted to avoid replatforming applications and learning new tools to take advantage of the public cloud. VMware enabled a successful move by providing consistent infrastructure, tools, and processes— in other words, a digital foundation. VMware now provides DFS the ability to run any application from edge to core to cloud while providing the consistency between clouds that makes infrastructure seamless—it just works.

Most businesses have already virtualized their servers and have some workloads in the public cloud. The challenge has been to link the two. Too often the result is multiple infrastructure teams, which reduces operational efficiency. Without a big-picture vision and an integrated approach to multicloud management, functions such as replatforming apps for the public cloud can become pain points. Your data center is complicated; the cloud is making IT even more so.

The next step in digital transformation requires businesses to adopt a common platform to manage multicloud deployments, a strategy that 42% of organizations have already adopted, according to IDG's 2018 "Cloud Insights" study. Hyperconverged infrastructure delivers consistency between clouds and simplicity through automation, enabling organizations to begin their journey to a true hybrid cloud architecture.

Why VMware for Your HCI-Enabled Hybrid Cloud

VMware vSAN powers industry-leading HCI solutions with high-performance architecture consisting of:

- [vSphere](#): an industry-leading virtualization platform
- [vSAN](#): the only vSphere-embedded storage for virtual machines and containers
- [vCenter Server](#): a unified and extensible management solution

Native to your hypervisor and leading clouds, VMware vSAN provides a simple evolution to a full-stack HCI, enabling organizations to leverage existing virtualization tools and IT skill sets. A single team can manage all data center resources (including networking and advance management) in the same tool, protecting and optimizing your current IT investments.²

By creating consistent operations from edge to core to cloud, HCI powered by VMware provides multicloud capabilities across hundreds of public cloud vendors and supports all critical hybrid cloud use cases. Through policy-based intrinsic security, data at rest and data in flight are protected from internal and external threats.

In addition, VMware offers the largest HCI hybrid cloud ecosystem and the broadest flexibility. With these certified solutions and day 1 support of the latest technology, you can deploy HCI on your preferred server vendor's hardware and extend the environment across public cloud providers.

VMware and Intel have partnered to offer Intel Select Solutions for vSAN, a family of workload-optimized, verified HCI solutions based on the Intel Xeon® Scalable processor family targeting today's complex data center workloads. This partnership also delivers investment protection and the highest performance with Intel® Optane™ SSDs and VMware vSAN.

vSAN and Intel offer:

- Verified infrastructure configurations that reduce complexity and investment in hardware evaluation and software integration
- Faster and easier deployment of infrastructure for data centers, saving time and money while significantly reducing strain on IT resources
- Verified to meet or exceed a performance threshold with optimized security, reliability, and agility
- Select Solution is delivered to market by multiple server vendors

Conclusion

A hyperconverged infrastructure enables you to centrally manage your entire infrastructure, from edge to core to cloud, with a common operational model while simplifying and automating key processes. IT leaders are taking note: Of that \$2 trillion in transformation spending cited by IDC, 29%—\$571 billion—will be spent where infrastructure lives: the data center.

VMware delivers the most complete multicloud solution on the market today, providing a common infrastructure enabling businesses to use, manage, and securely power any application in any cloud. VMware, combined with servers based on Intel Xeon Scalable processors and Intel® Optane™ SSDs, provides the most reliable HCI solution while enabling businesses to modernize their infrastructure, automate IT, and run modern applications.

To learn more about leveraging your next data center refresh to consolidate infrastructure for the future of your digital business, go to

[Hit Refresh.](#)