# How 3 Leading Organizations Built Modern Infrastructure with VMware Cloud Foundation

**Get Started** 





### Modern Infrastructure Initiatives

Key trends driving the need for modern infrastructure



### **Cloud operating model**

Minimize the IT overhead of managing an infrastructure.



### **Reliability, security and resiliency**

Minimize downtime with a highly available, secure and resilient infrastructure.



### **Software-defined infrastructure**

Deploy an infrastructure in which compute, networking and storage are abstracted and controlled by software.



### Deeply integrated environment

Easily extend and integrate infrastructure across different endpoints.



### **Flexibility and scalability**

Build an IT infrastructure that can quickly adapt to changing business needs.



### Modern workloads

Support containers, micro-services and AI/ML workloads to deliver modern apps.



### **Automation and orchestration**

Implement automated infrastructure provisioning and deliver a simplified management experience.



### **Sustainability**

Enhance energy efficiency, optimize resource utilization, and minimize the infrastructure's carbon footprint.





### Modern Infrastructure Challenges Pain points in building modern infrastructure

Here are the main challenges to consider:



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### Skills gaps

may require investments in training existing workers and/or hiring new talent.



4

### Cost management

can be difficult due to dynamically changing business needs, leading to hidden costs and infrastructure overprovisioning.



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Inconsistent infrastructure and vendor lock-in can limit flexibility, interoperability and innovation.

### Increasing complexity, time, risk and costs



### Modern Infrastructure Use Cases Modern infrastructure to fit your needs

Whether you're looking to build or modernize your private cloud infrastructure, provide self-service laaS, or extend your data center to the cloud, VMware Cloud Foundation<sup>™</sup> (VCF) has you covered.

### **Build and operate private cloud** infrastructure on-premises or at the edge

Leverage the flexibility and scalability of cloud computing while maintaining control over organizational data, enhancing security, and improving latency.

### Implement automated infrastructure to provide laaS

Adopt a self-service model to deliver laaS to developers, DevOps engineers, platform engineers, data scientists, and line-of-business owners.

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### **Extend data center to** the cloud

Solve for a variety of organizational needs such as footprint expansion, on-demand capacity requirements, the need to set up a DEV/QA/UAT environment, or a desire to have infrastructure ready for unplanned projects.





#### **Business Value**

### Unlock the exceptional business value of VMware Cloud Foundation



1. IDC White Paper, sponsored by VMware by Broadcom. "The Business Value of VMware Cloud Foundation," doc #US52312224. August 2024.

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**Enhance infrastructure** scalability.

Improve operational efficiency and productivity.

Achieve faster time to market.

VCF by the numbers <sup>1</sup>	
<b>↓34%</b>	lower infrastructure costs
<b>† 53%</b>	infrastructure team efficiencies
<b>† 52%</b>	security team efficiencies
<b>42%</b>	lower three-year cost of operations
<b>† 61%</b>	faster to deploy new VMs
↓98%	less unplanned downtime





### TCO Comparison VCF vs. traditional infrastructure



2. IDC FutureScape – The Infrastructure and Cloud Impact

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### VCF vs. public cloud



### Case Study Charlotte Pipe and Foundry Company

### Who is Charlotte Pipe and Foundry?

A family-owned company founded in 1901 and based in Charlotte, NC, Charlotte Pipe and Foundry designs and manufactures premium cast iron and PVC pipe products for industrial, commercial, and residential plumbing industries.

#### **Business needs**

- Reduce costs and improve operational efficiency.
- Build a robust and flexible digital infrastructure.
- Use data analytics to improve manufacturing processes and decision-making.
- Protect company data from cybersecurity threats.
- Leverage advanced IT systems to uphold sustainability standards.

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### CHARLOTTE PIPE AND FOUNDRY COMPANY

### Improved efficiency and security while reducing costs with VCF

- VCF provided an enterprise-ready infrastructure for private and public clouds with enhanced network performance, stability, and agility.
- VCF Automation helped automate processes and delivered developer-ready infrastructure for improved operational efficiencies and reduced costs.
- Built-in VMware NSX<sup>®</sup> micro-segmentation strengthened the company's cybersecurity posture.

"VMware Cloud Foundation is our trusted solution for better data and infrastructure management. It's a proven product that has automated our processes, improved our network's performance, and heightened stability."

#### **Rodney Barnhardt**

Server Administrator, Charlotte Pipe and Foundry







### Case Study **GCI** Communications

### Who is GCI Communications?

Serving Alaska for more than 40 years, Anchorage-based GCI Communications is the state's largest telecommunications provider with nearly 2,000 employees.

#### **Business needs**

- Deploy and maintain infrastructure in remote Alaskan locations to provide services to customers in those regions.
- Automate, simplify and standardize infrastructure.
- Provide developers with choice of tools while deploying infrastructure.

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#### Quickly connected remote Alaskan communities with apps built on VCF

- Used automated deployment and lifecycle management to provide developer-ready private cloud infrastructure.
- Got infrastructure up and running for call center operations in just 3 months.
- Deployed new apps within a few weeks instead of months.
- Reduced operational burdens and delivered new functionalities to customers faster.

"By removing a lot of operational burden, VMware Cloud Foundation allows us to focus on application developers and providing new functionality to our customers and increase business value."

Jeremy Mayfield

Sr. Solutions Architect, GCI Communications Corp.





### Case Study EPFL

### Who is EPFL?

The École Polytechnique Fédérale de Lausanne (EPFL) is a research institute based in Lausanne, Switzerland, specializing in physical sciences and engineering. Comprised of 11,000 students, 350 faculty and 6,000 staff, EPFL is home to over 500 laboratories and research groups, each at the forefront of science and technology.

### **Business needs**

- Provide IT services to researchers in a faster, simpler, and more reliable manner.
- Maintain compliance with Switzerland's data sovereignty laws.
- Be able to provision new virtual machines within 15 minutes.

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### Supported research dynamism with Anything-as-a-Service approach and VCF

- Deployed private cloud infrastructure with VCF to provide compute, storage and networking, as well as load-balancing and flexibility.
- Met goal of achieving "15-minute provisioning" and increased number of virtual machines in use by 100%.
- Leveraged VMware NSX Distributed IDS/IPS to help protect sensitive research work.
- Enhanced resource management with private cloud to avoid over- and under-provisioning.

"VMware Cloud Foundation provides everything we need: compute, storage and networking as well as load balancing and flexibility. With VCF Automation we're providing a public cloud-like user experience while maintaining security, compliance and control. We are a small team, but VMware enables us to offer anything as a service (XaaS)."

#### **Philippe Morel**

Director of IT Operations and Infrastructure, EPFL





## Break through the barriers of building modern infrastructure

VMware Cloud Foundation delivers:

- A comprehensive private cloud platform
- Support for both modern and traditional workloads
- Self-service infrastructure provisioning with automated deployment and lifecycle management
- A hardened infrastructure with built-in security at every layer
- A highly available, resilient infrastructure providing uninterrupted business operations

Check out these helpful resources to get started: VCF Website Datasheet Blogs Private Cloud Modernization Program Solution Brief VCF Total Cost of Ownership White paper Infographic Hands-on Lab **Getting Started** HoL Catalog Guide: VCF technical documentation Follow us: YouTube LinkedIn X



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