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### The **SMART CHOICE** for More Workloads with Less Infrastructure

SUPERCHARGED

MODERN

AUTOMATED

RELIABLE

TRUSTED

**COST-OPTIMIZED** 

HYBRID CLOUD-READY

**OPTIMIZED** 

NTELLIGENT

**CYBER-RESILIENT** 

**ENERGY-EFFICIENT** 

### Introduction

### 11 Tips for Successfully Upgrading Data Center Solutions

Businesses and governments plan to upgrade their existing data center solutions (compute, storage, and virtualization) to replace incompatible and outdated hardware and implement modern application development, cloud operating models, and deployment practices.

Here are eleven actionable tips learned from helping thousands of our customers and partners in their modernization and cloud acceleration journey.

Hitachi Vantara



# Tip 1: Design for most performance-critical applications with low latency for processing and retrieval operations.

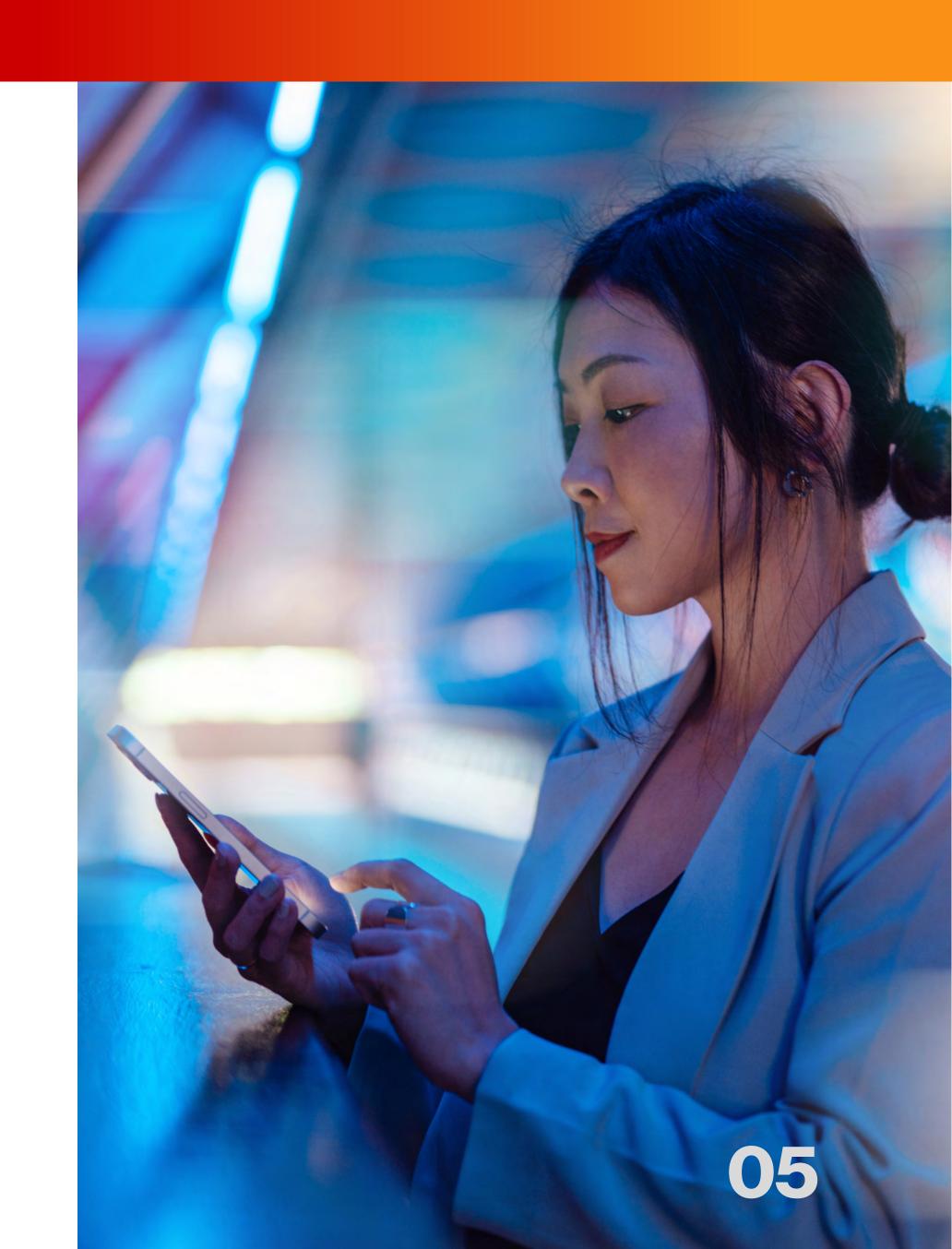
**Supercharged** infrastructure to power business-critical workloads. Gain a competitive advantage with ultra-low latency infrastructure for performance-critical applications. Latency as low as 39 µs enables you to maximize the revenue potential and accelerate insights.





# Tip 2: Invest in a future-proof data infrastructure that supports peak performance requirements and scales to support new applications.

**Modernized** tech stacks, with unified management software, bring together best-of-breed Hitachi VSP storage, Cisco UCS compute, Cisco Nexus, and MDS switches to deliver on your technology needs for today and tomorrow.





## Tip 3: Leave nothing to chance – automate everything.

**Automate** workflows to innovate and simplify complex operations with built-in workflow orchestration or integrate with existing Ansible, Terraform, or other tools. Cisco Intersight and Hitachi Intersight cloud operations platforms offer visualization, optimization, and orchestration for applications and infrastructure.





## Tip 4: Upscale your data center and achieve 100% data availability.

**Reliability** keeps applications running non-stop with uninterrupted access to storage (tolerating failures of more than one component/link) through the highly reliable design of converged infrastructure. Backed by Hitachi's 100% Data Availability Guarantee, VSP systems are engineered to have no single points of failure and multiple levels of redundancy. These systems leverage over 20 years of innovation and over 1,500 issued storage patents to rightfully be the gold data storage standard.





## Tip 5: Partner with innovators trusted by businesses like yours.

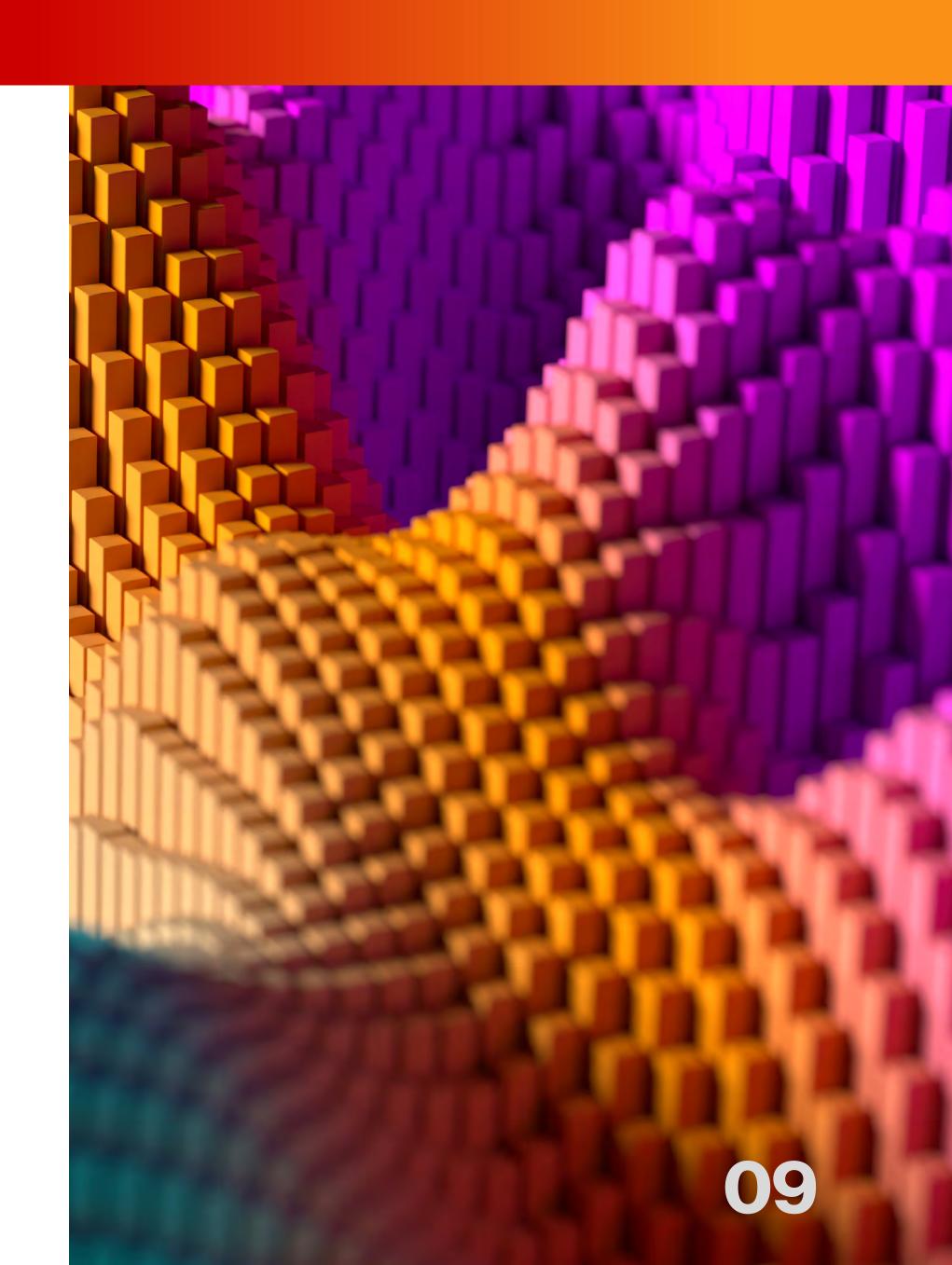
**Trust** partners with which global businesses and governments trust their applications and data. Rome wasn't built in a day; neither was the lasting trust that Hitachi and Cisco have earned for high performance, security, availability, and vertical expertise among thousands of customers and partners.



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## Tip 6: Architect for more workloads, less infrastructure, and reduced TCO.

**Cut** down TCO by consolidating your workloads on power-house infrastructure. Hitachi VSP storage packs a punch with up to 660,000 IOPS per RU (rack unit) and 365TBe per RU, supporting greater VM density and reducing data center costs.





## Tip 7: Build a cloud operating model anywhere, with flexible consumption and total management.

**Hybrid** Cloud Foundation delivers the best on-premises and public cloud infrastructure that integrates with VMware, Red Hat virtualization, and container solutions. Flexibility for as-a-service consumption and optional fully managed services enable your team to focus on what matters the most—your customers!



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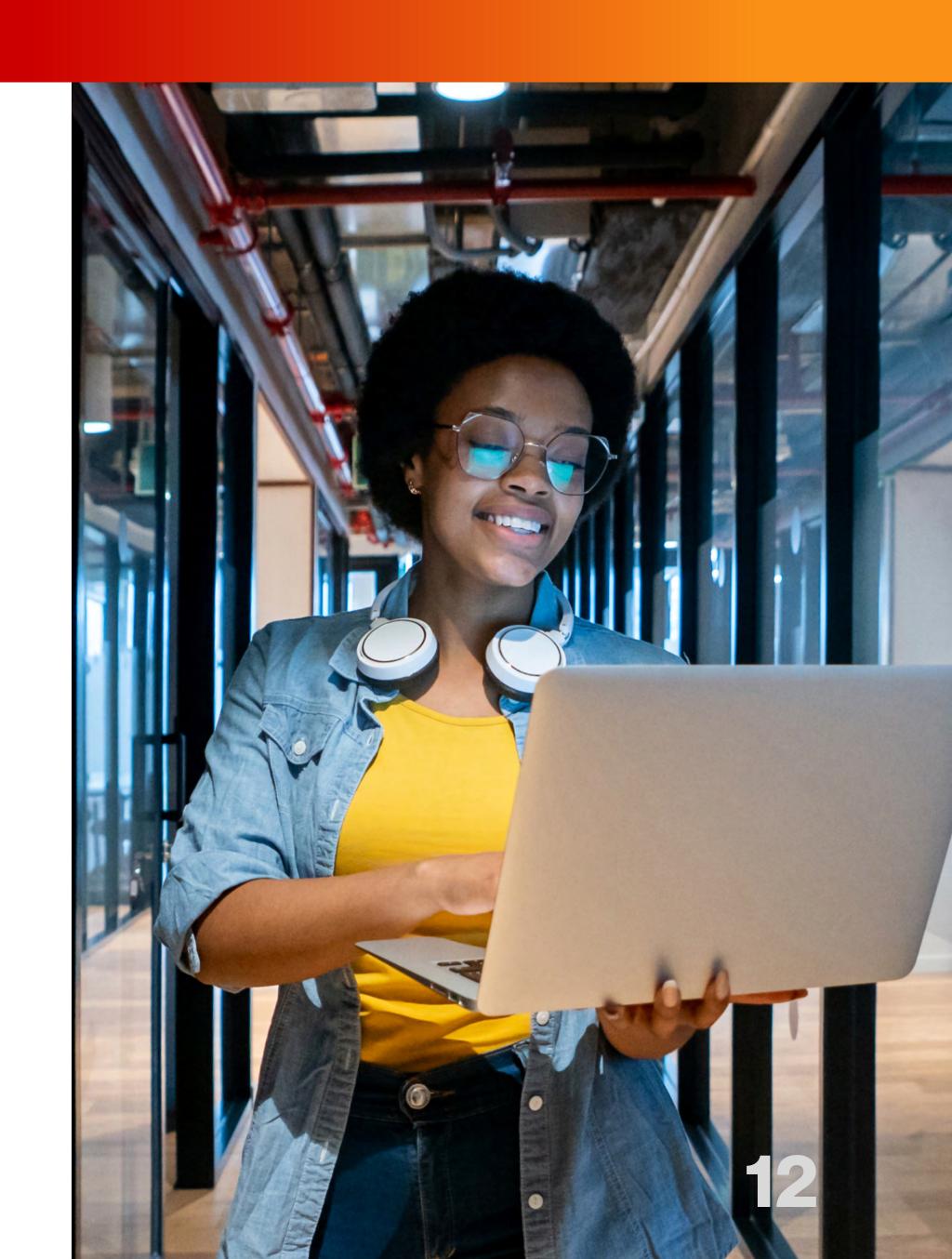
## Tip 8: Reduce infrastructure and vendor sprawl with a common platform.

**Optimized** solutions for VMware, containers, SAP HANA, databases, and VDI are pre-validated solutions designed for high performance with less manual work. Several validated, published reference architectures for Cisco and Hitachi adaptive solutions enhance the customer experience and remove uncertainty.



## Tip 9: Make your system administrator's job easier and uncomplicated.

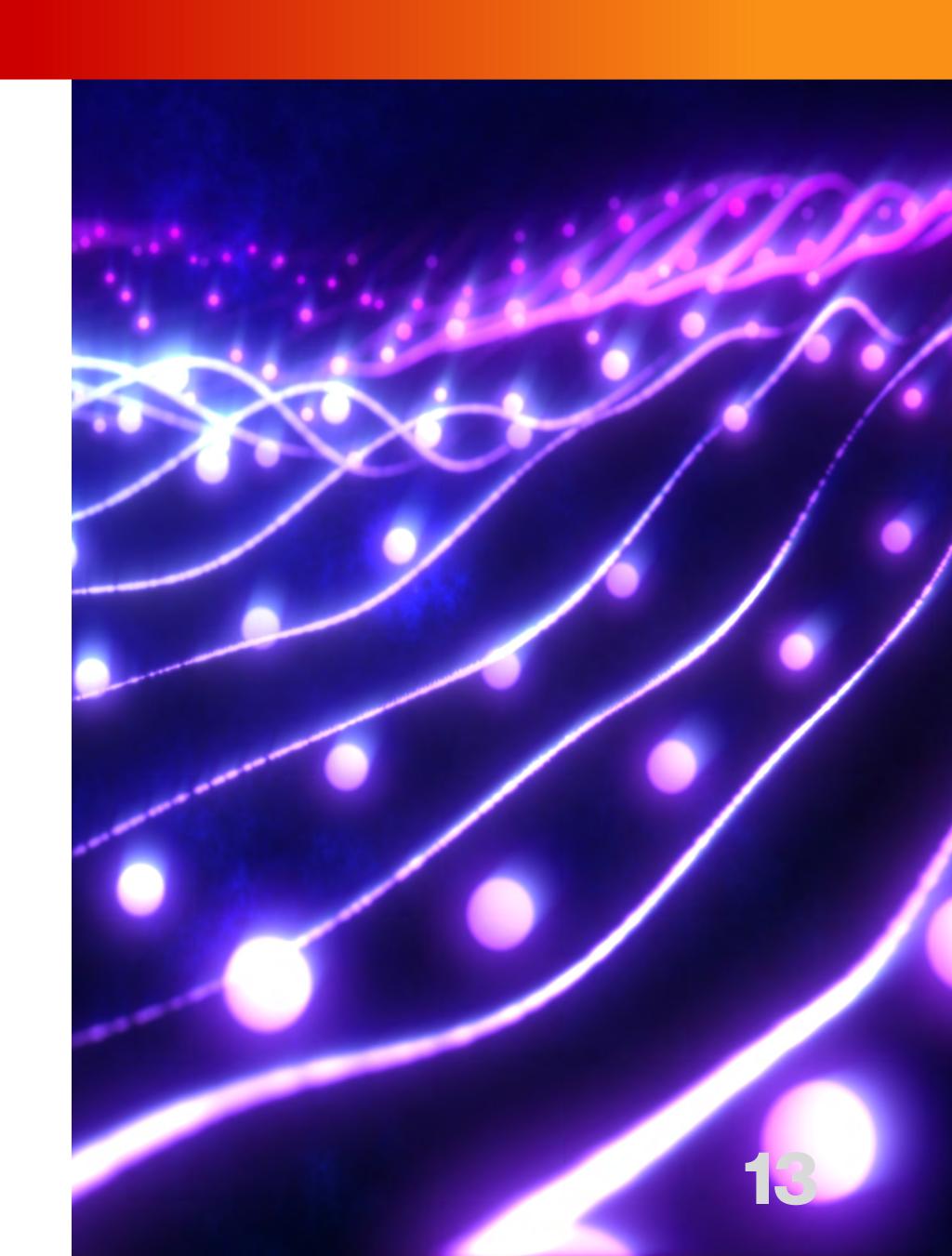
**Intelligent** infrastructure management incorporates real-time visibility and historical data analysis for usage projections, resource forecasting, auditability, and troubleshooting operations. Manage full-stack IT operations, including compute, storage, and networking switches, day 0-2 with easy-to-use and comprehensive cloud-hosted Cisco Intersight software.



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## Tip 10: Safeguard against cyber threats, including ransomware.

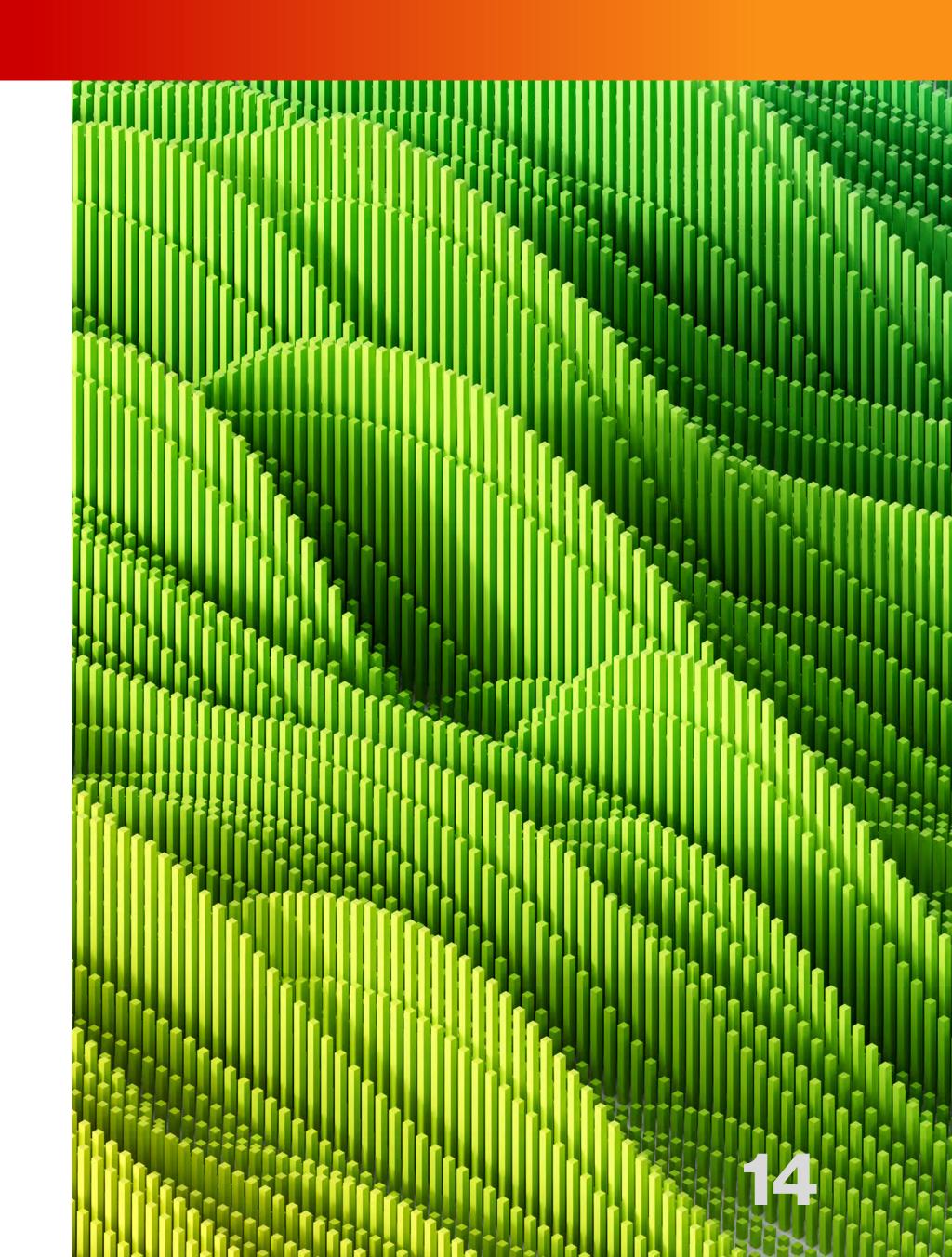
**Cyber-resilient**, its' trustworthy backbone keeps bad actors at bay and offers the fastest ransomware recovery, up to 1,500 VMs in 70 minutes, in partnership with CyberVR for VMware environments. Immutable snapshots prevent any compromises with data integrity and help quickly restore operations.





## Tip 11: Say hello to cleaner, eco-friendly, and space-efficient technologies.

**Energy-optimized** to deliver on sustainability goals, Hitachi Vantara is the only storage provider Carbon Footprint certified for products, which helps cut carbon emissions by up to 96%. Adherence to stringent internal protocols results in designing and developing infrastructure solutions that consume less energy and emit less carbon with each new version. Cisco UCS X-Series compute helps lower hardware operating costs by up to 73% and uses constant monitoring and cooling algorithms to adjust cooling and power usage dynamically for optimal efficiency.



### Cisco and Hitachi Adaptive Solutions for Converged Infrastructure.

It's time to upgrade your data center hardware and say goodbye to delayed business outcomes, resource inefficiency, and system downtimes with a mature, robust, scalable, converged infrastructure.



### **ABOUT HITACHI VANTARA**

Hitachi Vantara, a wholly-owned subsidiary of Hitachi Ltd., delivers the intelligent data platforms, infrastructure systems, and digital expertise that supports more than 80% of the Fortune 100. To learn how Hitachi Vantara turns businesses from data-rich to data-driven through agile digital processes, products, and experiences, visit hitachivantara.com.





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