Hitachi Vantara

eBook
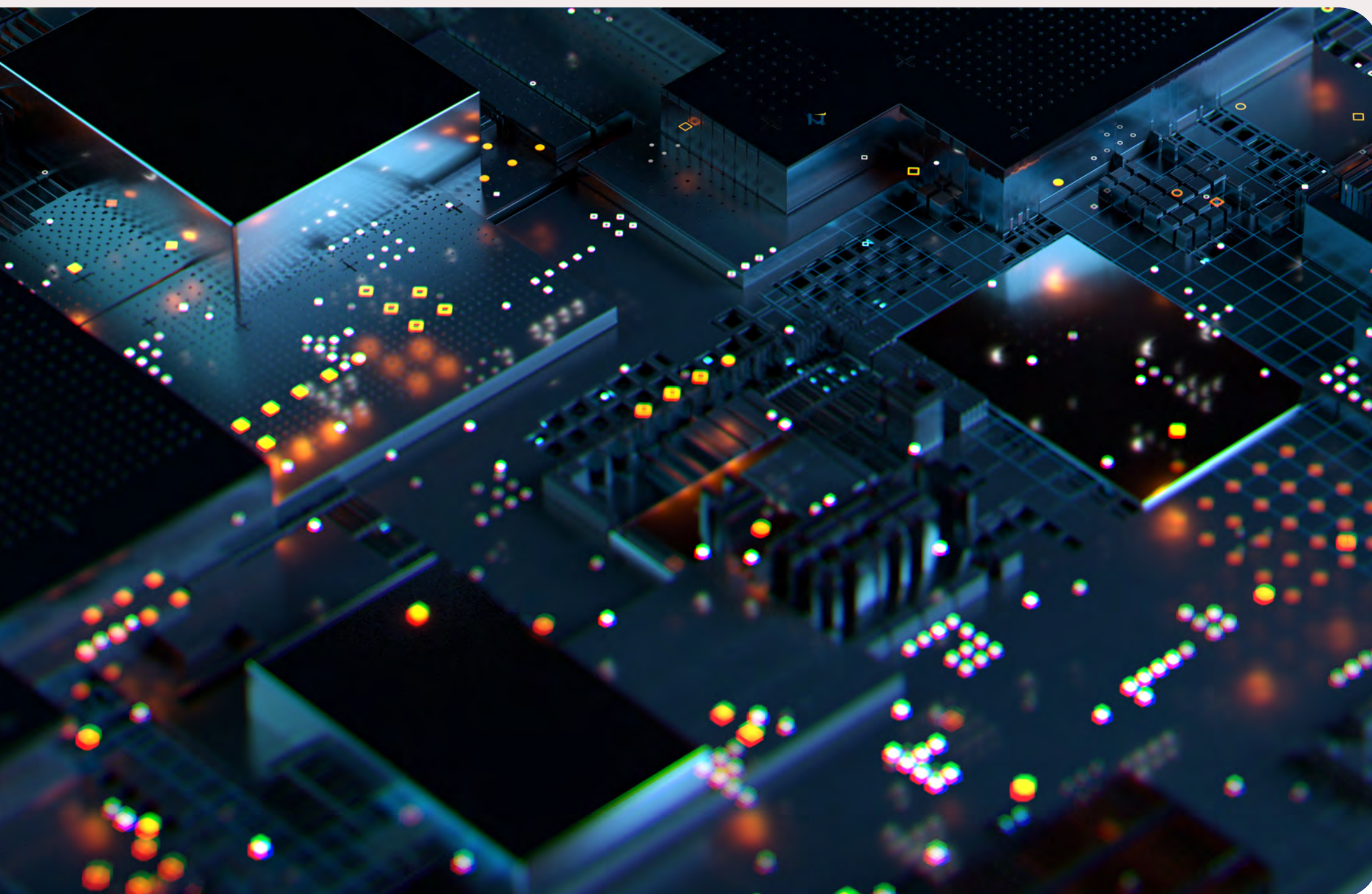
Top 10 Reasons To Choose Hitachi Vantara for Microsoft SQL Server Infrastructure

Deploy powerful infrastructure solution with ease and efficiency

Microsoft SQL Server is a popular choice for businesses due to its robust features, security and scalability. It supports business growth, from small stores to global enterprises, by handling high volumes of business and customer data efficiently. Businesses leverage Microsoft SQL Server for real-time order tracking and customer insights.

However, deploying and managing Microsoft SQL Server infrastructure comes with several challenges that businesses need to address for optimal performance, security and scalability, including:

- Limited IT staff and budget constraints, making it difficult to manage and optimize database performance effectively.
- Performance bottlenecks and scalability concerns that hinder growth, impacting operational efficiency and long-term business expansion.
- Sluggish data retrieval, causing executives and teams to experience delays in accessing real-time insights for decision-making.

Slow queries and database timeouts that degrade application performance, leading to frustrated users due to unresponsive apps, transaction time-outs and bad customer service experiences.

Hitachi Vantara Virtual Storage Platform One (VSP One) powers integrated systems for Microsoft SQL Server. The result? An easy-to-use, powerful and cost-efficient platform that accelerates deployment, simplifies administration and lowers TCO.

Read on for the top 10 reasons why integrated Hitachi systems and VSP One storage solutions are the best fit for deploying your Microsoft SQL Server.
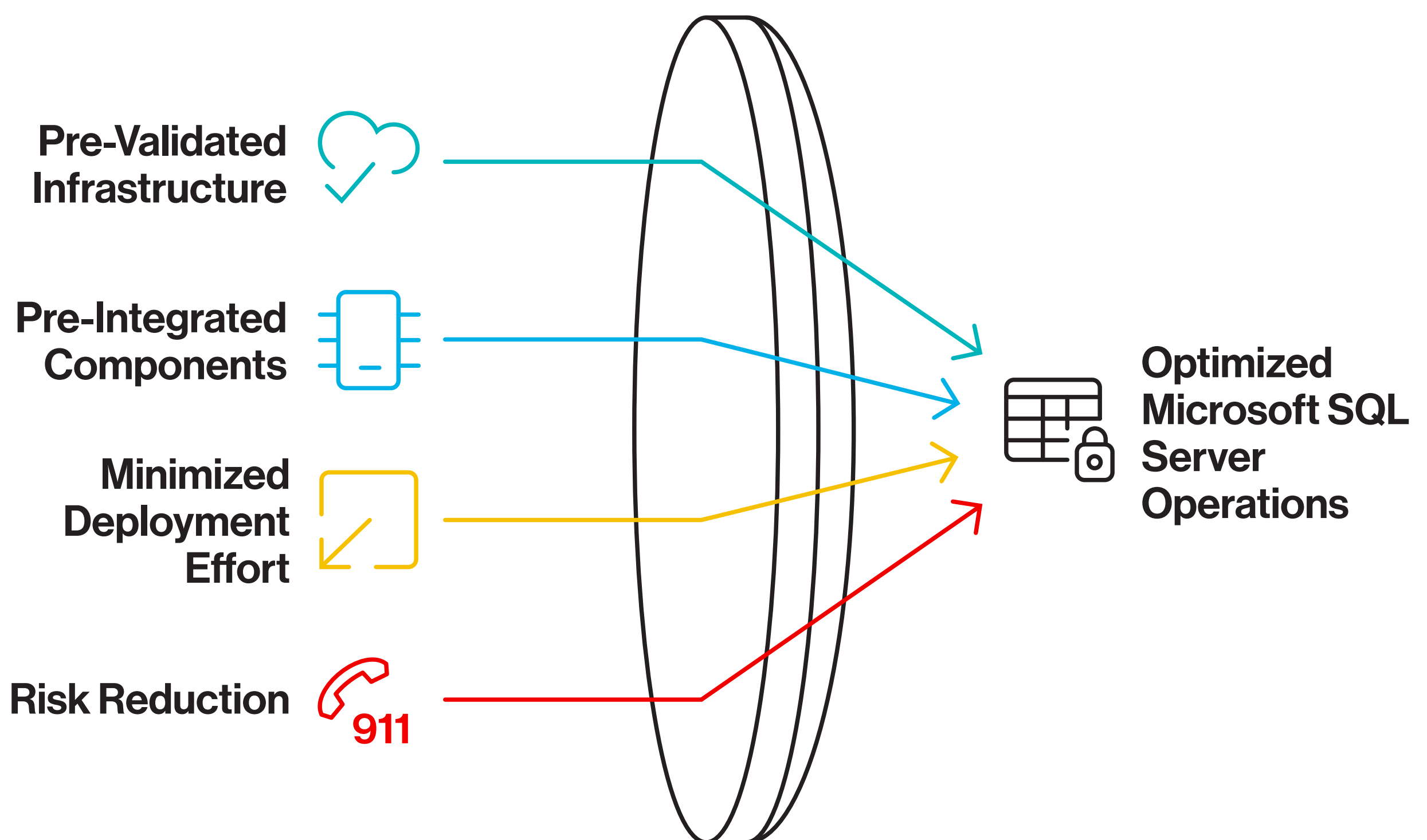
1. Simplified Operations

Eliminate complexity with [VSP One unified management](#), a single console for managing Microsoft SQL Server storage across your on-prem and hybrid environments. Policy-based automation with Hitachi Ops Center simplifies provisioning, replication and backup policies to reduce errors and increase productivity. AI-driven insights help optimize SQL database performance.

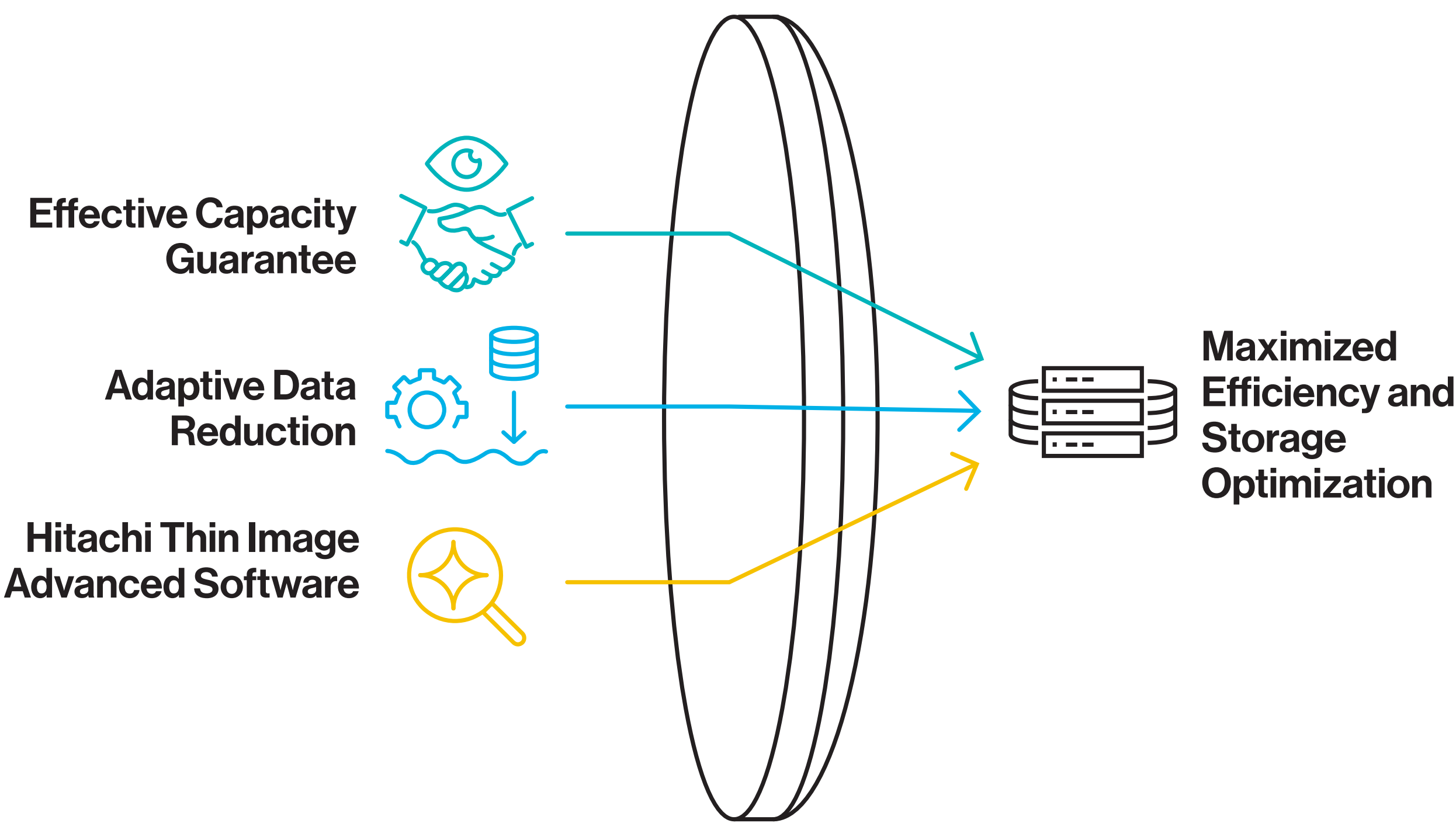# 2. Integrated Ready-to-Deploy Full-Stack Solution

Hitachi Vantara provides integrated systems for Microsoft SQL Server to create a pre-validated, pre-integrated infrastructure designed to optimize your SQL Server operations. Delivered as a ready-to-deploy infrastructure, the full-stack solution minimizes deployment effort and risk. Configurations are tested and optimized for SQL Server workloads. It reduces the risk of misconfiguration and performance bottlenecks.

Pre-Validated Infrastructure

Pre-Integrated Components

Minimized Deployment Effort

Risk Reduction

Optimized Microsoft SQL Server Operations

3. Maximized Storage Efficiency

The industry's only 4:1 no questions asked Effective Capacity Guarantee and adaptive data reduction capability maximize efficiency and ensure VSP One Block meets expectations. Hitachi Thin Image Advanced software saves you up to 90% or more disk space by storing only changed data blocks, and deduplicated and compressed snapshots.

Achieving Optimal Storage Efficiency

Effective Capacity Guarantee

Adaptive Data Reduction

Hitachi Thin Image Advanced Software

Maximized Efficiency and Storage Optimization

4. Peak Performance and Low Latency

Accelerate data retrieval with ultra-low latency infrastructure for faster analysis and decision-making. VSP One solutions deliver ultra-fast response times, ensuring optimal SQL Server performance. This Hitachi solution powered by VSP One Block arrays performs 29% more transactions per minute than the nearest competition. Similarly, IOs run 28% faster from this Hitachi solution for you to maximize revenue potential and accelerate insights.

3.2_{GBPS}

High Data-Transfer Rate

1.3X

Faster Than Closest

87μs

Ultra-Low Latency

5. Large Scale for Growing Organizations

Hitachi Vantara has optimized solutions for Microsoft SQL Server to allow independent server and storage scalability that meets varying resource needs for your business. The VSP One array seamlessly scales up to power multiple SQL Server instances and supercharge business applications. VSP One capacity expands seamlessly as your database grows — without performance bottlenecks.

6. Industry-Leading Availability

Trusted by global enterprises and governments with mission-critical data, Hitachi Vantara Virtual Storage Platform One arrays ensure continuous Microsoft SQL Server operations without downtime. Backed by our legendary 100% Data Availability Guarantee, VSP One Block systems are engineered to have no single points of failure and multiple levels of redundancy. VSP One arrays:
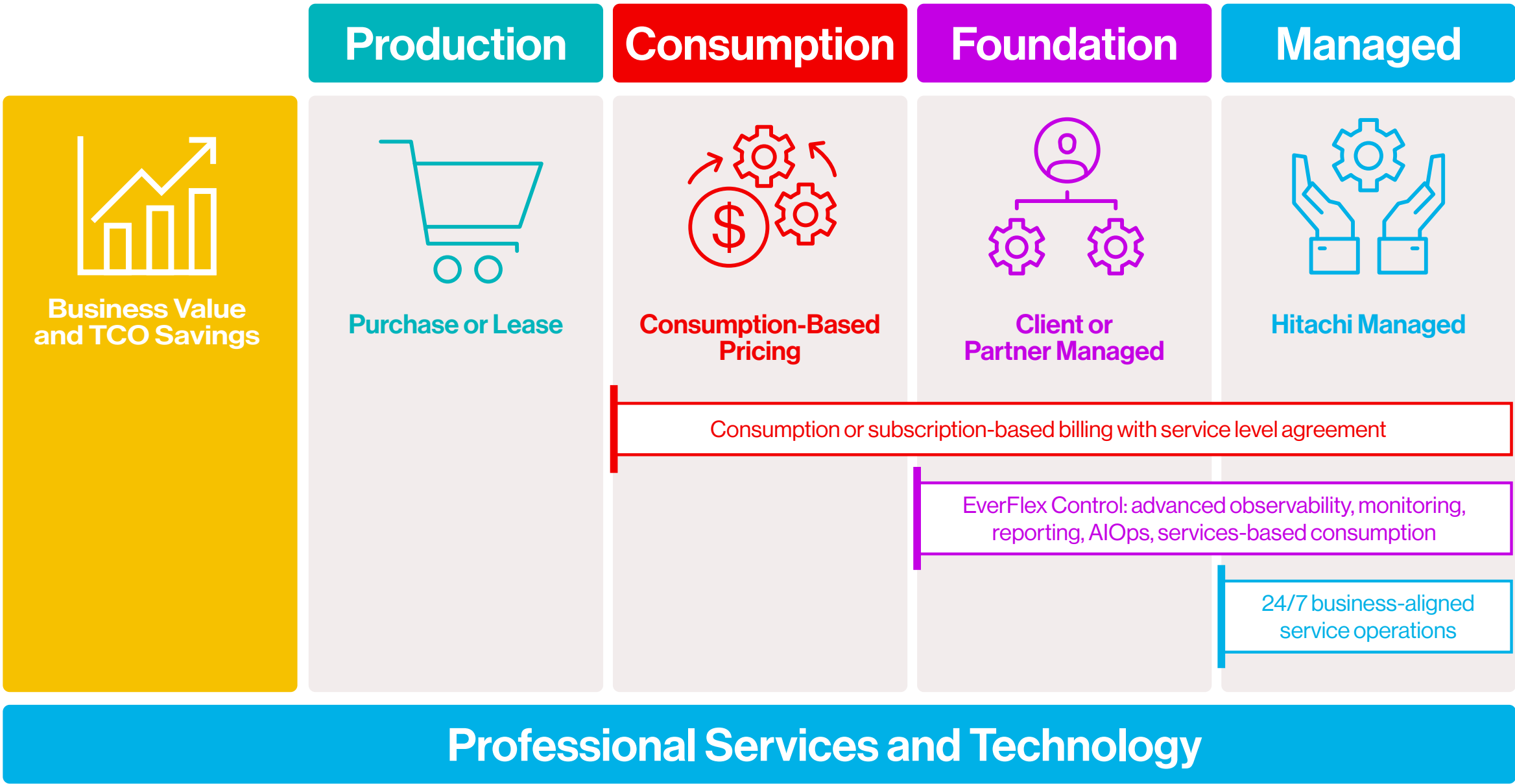
- Provide enterprise-grade data protection for SQL Server, ensuring high availability, backup efficiency, disaster recovery and security.
- Enable instant and incremental space-efficient snapshots for SQL Server backups without performance impact, while reducing your storage footprint.
- Protect your SQL Server backups from ransomware attacks by using immutable snapshots that prevent unauthorized modifications.
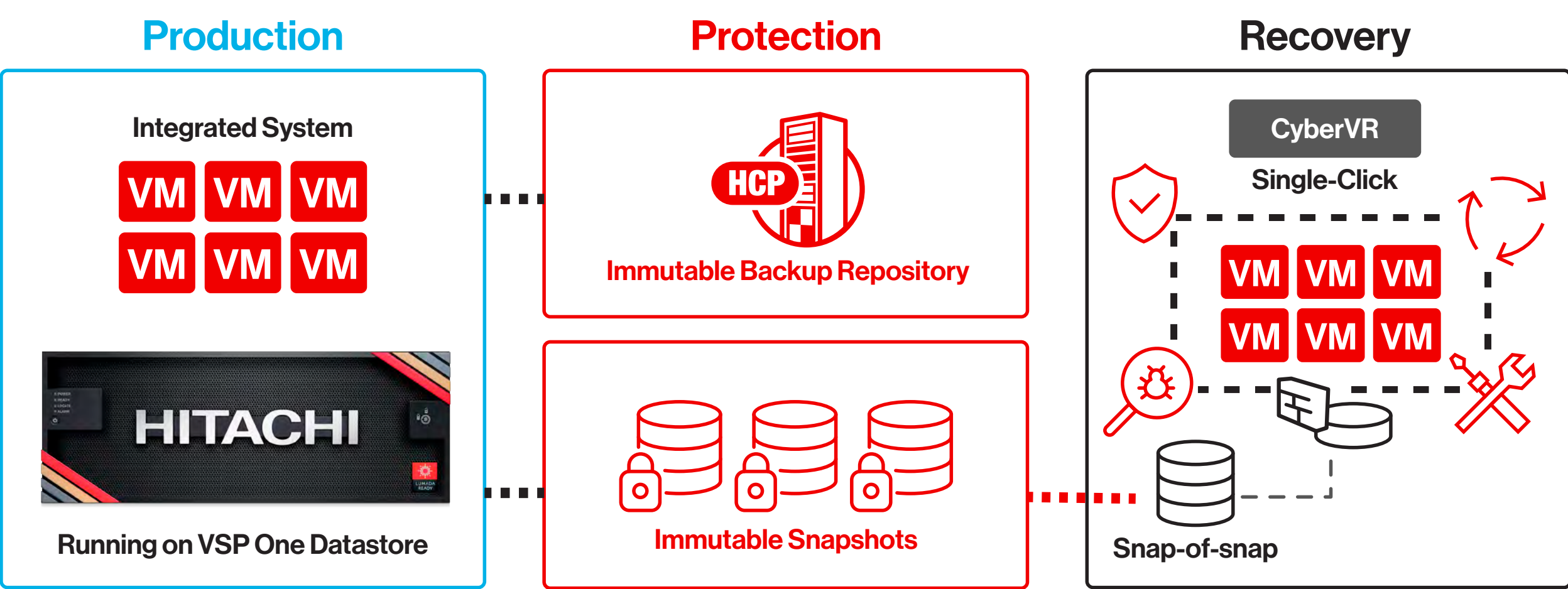
7. Flexible Consumption

Businesses benefit from EverFlex from Hitachi, which offers a flexible, consumption-based model that helps optimize and scale Microsoft SQL Server infrastructure with on-demand storage, compute and data management services. EverFlex helps you reduce upfront investments, improve performance and ensure resilience.

EverFlex From Hitachi — Levels of Service

Business Value and TCO Savings	Production	Consumption	Foundation	Managed
	Purchase or Lease	Consumption-Based Pricing	Client or Partner Managed	Hitachi Managed
		Consumption or subscription-based billing with service level agreement		
			EverFlex Control: advanced observability, monitoring, reporting, AIOps, services-based consumption	
				24/7 business-aligned service operations

Professional Services and Technology

8. Ironclad Security and Compliance

VSP One arrays provide enterprise-grade security and compliance features that protect Microsoft SQL Server environments from cyber threats, data breaches and regulatory risks. Immutable snapshots prevent unauthorized changes to your SQL Server backups and ensure recovery from ransomware attacks or accidental deletions. Automated data retention and archival using policies for compliance and secure multitenancy for multiuse environments.

Production

Integrated System

| VM | VM | VM |
| VM | VM | VM |

HITACHI

Running on VSP One Datastore

Protection

HCP

Immutable Backup Repository

Immutable Snapshots

Recovery

CyberVR

Single-Click

| VM | VM | VM |
| VM | VM | VM |

Snap-of-snap

On Prem • In Cloud • Hybrid

HCP = Hitachi Content Platform, VSP One = Hitachi Vantara Virtual Storage Platform One
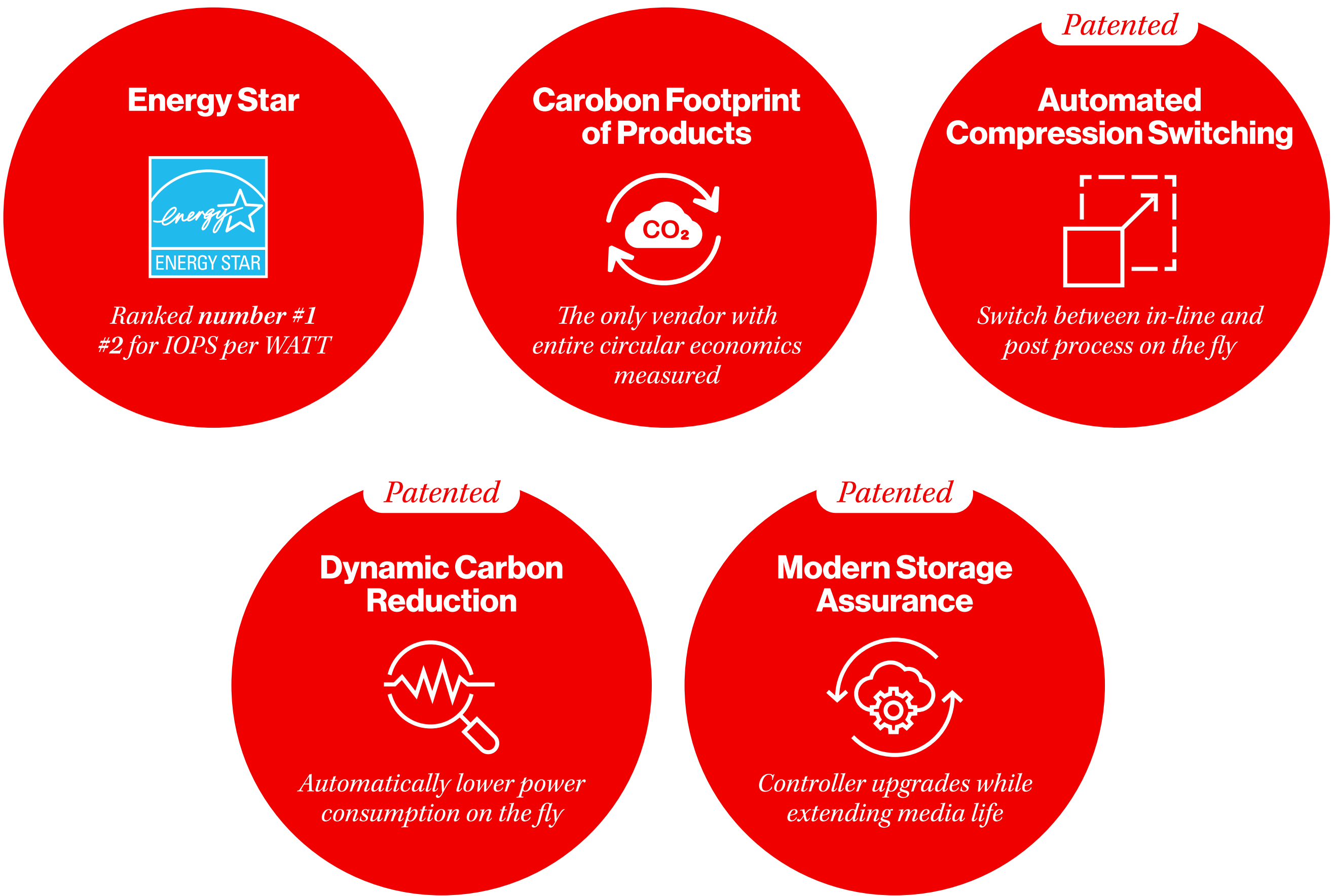
9. Enterprise Outcomes at a Midmarket Price

Integrated Hitachi solutions for Microsoft SQL Server, powered by Virtual Storage Platform One, deliver enterprise-level performance and reliability tailored to midmarket budgets. With a 4:1 Data Reduction Guarantee, VSP One optimizes storage efficiency, allowing midsized businesses to scale effectively without compromising on performance.

10. Decarbonized IT for a Greener Future

Hitachi Vantara delivers the most energy-efficient storage arrays that yield the highest IOPS per kilowatt hour (KWH) power consumption, leading to a sustainable, energy-efficient Microsoft SQL environment. Hitachi Vantara is the only storage provider certified by ENERGY STAR (placing first and second in a recent assessment) and receiving third-party verification of Carbon Footprint of Product (CFP) under Japan's SuMPO Environmental Product Declaration (EPD) program. Hitachi infrastructure solutions for SQL Server consume less energy and emit less carbon, helping your organization meet sustainability targets under your environmental, social and governance (ESG) policies.

Energy Star

*Ranked **number #1** **#2** for IOPS per WATT*

Carobon Footprint of Products

The only vendor with entire circular economics measured

Patented

Automated Compression Switching

Switch between in-line and post process on the fly

Patented

Dynamic Carbon Reduction

Automatically lower power consumption on the fly

Patented

Modern Storage Assurance

Controller upgrades while extending media life

With integrated systems for Microsoft SQL Server powered by VSP One, Hitachi Vantara offers go-to solutions that deliver a masterstroke against delayed insights, resource inefficiency and database downtimes with a mature, robust and scalable infrastructure.

Please visit www.hitachivantara.com to learn more about Microsoft SQL Server infrastructure solutions and how customers like you benefit by partnering with Hitachi Vantara in the journey to digital modernization.

Learn more →

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About Hitachi Vantara

Hitachi Vantara is transforming the way data fuels innovation. A wholly owned subsidiary of Hitachi Ltd., we're the data foundation the world's leading innovators rely on. Through data storage, infrastructure systems, cloud management and digital expertise, we build the foundation for sustainable business growth.