



# Which Vendor Offers the Broadest AI Portfolio for Scalable Innovation?

Research by Prowess Consulting determined that Dell Technologies provides the most comprehensive portfolio of AI solutions, along with services, support, security, and a compelling TCO.

## **Executive Summary**

Research conducted by Prowess Consulting found that Dell Technologies provides the world's broadest end-to-end Al portfolio from a single vendor. This conclusion is supported by our analysis of 13 vendors' Al-ready portfolios, in which we found that Dell Technologies offers solutions spanning 12 of the 13 evaluated categories. These included client devices, storage, networking, compute, cyber resilience, and professional services.

As organizations increasingly adopt AI across business functions—from analytics and automation to content generation and digital twins—they face an immediate need for scalable, modern infrastructure and client devices. Supporting these complex workloads requires more than high-performance compute; it demands adaptable data handling, enterprise-grade security, and comprehensive support capabilities. We found that a key enabler of Dell Technologies' leadership is the Dell™ AI Factory, which delivers a flexible, end-to-end approach to AI deployment. This approach supports the full AI lifecycle and spans planning and data preparation up to model design, testing, deployment, and ongoing infrastructure management. The Dell AI Factory also encompasses on-premises, multicloud, and hybrid environments. Its modular architecture and open ecosystem help organizations avoid vendor lock-in while integrating seamlessly with existing infrastructure.

By combining breadth of infrastructure and client-device portfolios with deep service expertise and cost-effective deployment models, Dell Technologies offers a compelling solution for organizations seeking to scale their AI initiatives more securely and efficiently.



## Who Offers the Broadest Al Portfolio?

As Al adoption accelerates across business functions, organizations need scalable infrastructure and client devices that support complex workloads. McKinsey & Company reports that 92% of companies plan to increase their Al investments over the next three years.<sup>1</sup>

For organizations looking to upgrade their infrastructure and client devices and stay ahead in the age of AI, the question is whether there is one vendor that best addresses these considerations, providing businesses with a broad portfolio of solutions spanning hardware, services, and support. Organizations are looking for partners who understand the AI landscape today, and who can help them bring comprehensive solutions to market so that they not only solve their current needs but are also set up for success in the future.

To answer that question, Prowess Consulting compared globally available Al-ready portfolios from the 13 vendors that encompass most of the market across 13 categories of Al solutions picked to comprehensively cover market relevance, industry standards, and technology trends. Our analysis found a clear winner, with Dell Technologies offering the world's most comprehensive Al infrastructure portfolio covering cloud to client devices.

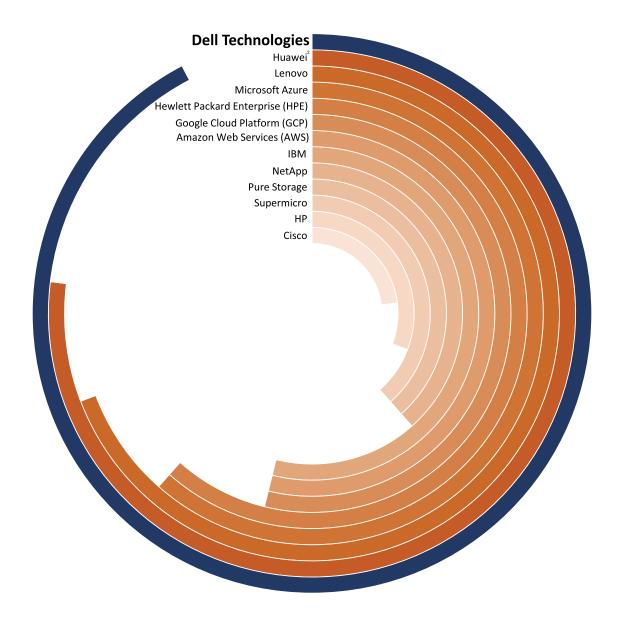


Figure 1. Radial bar chart displaying the number of categories examined in this paper, with Dell Technologies shown as the only provider with solutions spanning 12 out of the 13 categories

Table 1. Number of categories spanned per vendor examined in this paper; see Tables A1 and A2 for full details

Vendor	Number of categories spanned
Dell Technologies	12
Huawei <sup>2</sup>	10
Lenovo	9
Microsoft Azure®	8
Hewlett Packard Enterprise (HPE)	8
IBM	7
Amazon Web Services® (AWS®)	7
Google Cloud Platform™ (GCP™)	7
Supermicro	5
Pure Storage	5
NetApp	5
HP	4
Cisco	3

## **AI-Ready Solutions**

For each of the categories we evaluated, we classified a solution as "Al-optimized" or "Al-ready" if it was designed to support inferencing and fine-tuning of Al models and workloads. Our analysis did not include Al software, large language models (LLMs), or developer tools because these are widely available and open-source. The full list of categories is shown in Table A1 in the **Appendix**. Of the 13 categories we examined, Table 2 details the categories in which Dell Technologies offers solutions (Table A2 in the **Appendix** provides a complete listing of how all vendors examined stack up in terms of coverage of all 13 categories).

Table 2. List of categories assessed, along with those in which Dell Technologies provides solutions

Category	Dell Technologies
AI PCs	Yes
PC mobile workstations (laptops)	Yes
PC tower workstations (desktops)	Yes
PC rack workstations	Yes
File storage	Yes
Block storage	Yes
Object storage	Yes
Hyperconverged infrastructure (HCI)	Requires third-party hypervisor
Accelerated compute (servers)	Yes
Cloud-native solutions (deployable from cloud marketplaces)	Yes
Purpose-built backup appliances	Yes
Network switches	Yes
Professional services	Yes

**Note**: We only counted solutions that are fully provided by a single vendor; if a vendor relies on third-party partners for part of a solution, we excluded that offering from their total, though these are noted Table A2 in the **Appendix** as getting partial credit. Thus Dell Technologies got partial credit for hyperconverged infrastructure (HCI) because it offers the Dell VxRail™ and Dell™ XC Series solutions in partnership with VMware and Nutanix, respectively.

Dell Technologies provides Al infrastructure at every scale, from desktop and laptop PCs to servers and data center infrastructure to the edge. Its broad range of Al solutions offers flexibility to fit into an organization's existing environment, whether on-premises or in a multicloud or hybrid cloud. Compared to other solutions we examined, the broad Dell Technologies portfolio and open ecosystem can help minimize disruption and can support legacy integrations. This enables organizations to extend Al capabilities without having to re-architect large portions of their IT stacks or compromise their established security postures.

## The Dell™ Al Factory

To better understand Dell Technologies' approach to AI, we examined the **Dell AI Factory**—a modular and scalable approach designed to support AI workloads across edge, data center, and cloud environments. The Dell AI Factory comprises a portfolio of products, solutions, and services optimized for AI workloads. It brings these together with an open ecosystem of partners, validated and integrated infrastructure and data management solutions, expert services, and best practices to help customers quickly achieve AI outcomes. This approach emphasizes flexibility, security, and customization, enabling organizations to tailor AI deployments to their specific needs.

Key benefits of the Dell Al Factory include:

- End-to-end Al capabilities, from edge to cloud
- · Interoperability and an open ecosystem
- Professional services and support
- Cost-effectiveness and efficiency for AI at scale
- Data protection and cyber-resilience

Dell Technologies provides a unified support structure across the entire Dell AI Factory ecosystem, acting as the sole point of contact for technical support on hardware, software, and deployment services. This streamlined approach eliminates the complexity of coordinating with multiple vendors and ensures seamless support for infrastructure, AI accelerators, operating systems, and day-2 operations. With optional 24/7 support and dedicated account management, mission-critical environments can benefit from unmatched operational efficiency.

## End-to-End Al Capabilities from Edge to Data Center to Cloud

The Dell Technologies portfolio supports AI workflows across a range of environments, from client devices to cloud infrastructure. We found that this integration accelerates time-to-market for AI initiatives by streamlining the AI lifecycle, from data collection and preparation to model deployment and optimization. It also provides the scalability needed to support AI growth as demands increase. Organizations can gain efficiency and interoperability across environments because the infrastructure aligns with where their data resides: at the edge, in the core, or in the cloud.

## Interoperability and an Open Ecosystem

Dell Technologies solutions are designed to operate within a broad ecosystem of validated partners, technologies, and platforms that adhere to industry standards. This open approach not only ensures compatibility across diverse systems but also empowers organizations to build hybrid environments tailored to their unique needs. By supporting a wide range of software stacks and enabling smooth integration with existing and emerging technologies, Dell Technologies reduces the complexity often associated with multi-vendor environments and helps organizations avoid vendor lock-in.

#### **Professional Services and Support**

Dell Technologies offers a suite of services designed to assist organizations throughout their Al journeys. These services include guidance on use case development, architecture design, deployment, and ongoing management. The goal is to help customers align Al initiatives with business objectives while navigating technical and operational challenges.

## **Cost-Effectiveness and Efficient AI at Scale**

Organizations evaluating cloud versus on-premises AI deployments might find value in Dell Technologies' solutions. A **separate study by Prowess Consulting** found that private cloud solutions from Dell Technologies can offer cost advantages over public cloud alternatives for certain workloads.<sup>3</sup> To support diverse budgeting strategies, Dell Technologies provides flexible consumption models, including both traditional capital expenditures (CapEx) and as-a-service options, in addition to in-house financing provided through Dell Financial Services. The financing and consumption model flexibility provided by Dell Technologies to its customers helps them streamline procurement, optimize budgeting, and reduce financial risks associated with overprovisioning or underutilization, empowering organizations to achieve more with confidence.

#### **Data Protection and Cyber-Resilience**

As Al workloads grow, so does the need for robust data protection. Dell Technologies' cybersecurity and cyber-resilience solutions—including AlOps, Dell PowerProtect™, Dell™ SafeBlOS, Dell™ SafeID, and a secure supply-chain, among others—are designed to safeguard data across physical, virtual, and multicloud environments. These offerings aim to support recovery and governance needs, helping organizations maintain continuity and resilience in the face of operational disruptions or cyber threats

## **Building an AI Strategy for Success**

To build performant, scalable, and secure AI workflows, organizations need a vendor that can deliver comprehensive infrastructure solutions across the entire spectrum. Based on our research, we determined that Dell Technologies offers the broadest AI solutions portfolio from PCs and workstations to data center to cloud. The Dell AI Factory approach of bringing AI to the data, wherever it resides—on clients, servers, private or hybrid clouds, or at the edge—helps keep data secure and accessible, while reducing the risks and costs associated with moving massive datasets to external cloud environments. Additionally, Dell Technologies' extensive and customizable services and support offerings allow organizations to adopt and scale AI more easily and drive faster, more impactful outcomes.

## **Frequently Asked Questions**

This FAQ highlights the most common questions from technical decision makers and provides concise, evidence-based answers drawn from our comparative analysis. Use these questions and answers for quick reference during planning discussions or when briefing stakeholders.

## **Question 1 (Single-Vendor Benefits)**

Question: What is the value of having a single vendor?

**Answer:** Working with a single vendor simplifies planning, procurement, deployment, and support. It reduces integration risks, streamlines operations, and ensures consistent performance across environments. Dell Technologies offers unified support and validated solutions that span nearly the entire Al stack, which helps organizations move faster and with greater confidence.

### Question 2 (Portfolio Breadth)

Question: Who is a single vendor that truly spans the end-to-end AI infrastructure stack?

**Answer:** No vendor covers every element. However, in spanning 12 of 13 Al-infrastructure categories in our analysis, we found that Dell Technologies offers the broadest end-to-end Al portfolio of technology and services—all from a single vendor.

#### **Question 3 (Dell Technologies Benefits)**

Question: What are the benefits of AI solutions from Dell Technologies?

**Answer:** Dell Technologies provides Al-ready solutions across client devices, edge, data center, and cloud. Its modular architecture, open ecosystem, and flexible consumption models help organizations scale Al securely and cost-effectively. Dell Technologies also offers professional services, cyber-resilience tools, and 24/7 support.

#### Question 4 (Avoiding Vendor Lock-In)

Question: How do we avoid vendor lock-in if we choose Dell Technologies for AI infrastructure and client devices?

**Answer:** Dell Technologies' standards-based interoperability, open ecosystem of validated partners, and support for on-premises, multicloud, and hybrid deployments preserve choice across software stacks and clouds.

## **Appendix**

Prowess Consulting looked at 13 categories of Al offerings across 13 vendors (as shown in Table A2) to determine which vendor offers the broadest Al portfolio. For a category to qualify as part of a vendor's offerings, it needed to:

- Meet the definitions provided in Table A1
- Be provided fully by the specific vendor, as opposed to a partnered solution

Table A1. Al-ready infrastructure categories included in our analysis

Category	What Makes It Al-Ready?
AI PCs	Laptops or desktops with built-in neural processing unit (NPU) hardware specifically designed to handle AI workloads
Mobile (laptop) workstations	Laptops built to perform and handle high-end Al tasks such as data analysis, model training, and deep learning (DL) workflows, with multi-core processors, high-end GPUs, plenty of RAM, and fast solid-state drive (SSD) storage to handle large datasets and Al models
PC tower (desktop) workstations	Desktops built to perform and handle high-end AI tasks such as data analysis, model training, and DL workflows, with multi-core processors, high-end GPUs, plenty of RAM, and fast SSD storage to handle large datasets and AI models
PC rack workstations	Computers designed specifically to be installed and operated in a standardized server rack and built to perform and handle high-end AI tasks such as data analysis, model training, and DL workflows, with multi-core processors, highend GPUs, plenty of RAM, and fast SSD storage to handle large datasets and AI models
File storage devices	Scale-out network-attached storage (NAS) solutions that support Network File System (NFS) over Remote Direct Memory Access (NFS over RDMA) for high-throughput performance for AI and GenAI workloads
Block storage devices	GPUs that support high-performance computing (HPC), AI, GenAI, and datascience workloads
Object storage devices	Scale-out, high-performance infrastructure that supports large unstructured datasets, including AI and GenAI workloads
Hyperconverged infrastructure (HCI)	HCI solutions that support virtualized workloads, including AI or GenAI workloads
Accelerated compute servers	Servers with support for high-end GPUs, which are ideal for AI and GenAI workloads with high performance requirements
Cloud-native infrastructure (deployable from cloud marketplaces)	Software-defined versions of Al- and GenAl-ready storage infrastructure that can be deployed in a public cloud
Purpose-built backup appliances	Purpose-built backup systems supporting unstructured, AI, and GenAI workloads efficiently using transparent snapshots
Network switches	Open networking with high-density 100/400 gigabit Ethernet (GbE) ports that support AI and GenAI workloads
Professional services	Professional services offerings that help customers design, deploy, support, and manage AI and GenAI infrastructure

Table A2. Prowess Consulting compared a total of 13 categories of AI products and services across 13 vendors

Category	Dell Technologies	Lenovo	Supermicro	HPE	HP	Huawei <sup>2</sup>	Cisco	IBM	Pure Storage	NetApp	AWS®	Microsoft Azure®	GCP <sup>114</sup>
AI PCs	Yes	Yes	No	No	Yes	Yes	No	No	No	No	No	Yes	No
PC mobile workstations (laptops)	Yes	Yes	No	No	Yes	No	No	No	No	No	No	No	No
PC tower workstations (desktops)	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No	No	No
PC rack workstations	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No	No	No
File storage	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Block storage	Yes	Yes	No	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Object storage	Yes	No	No	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
HCI	Requires third-party hypervisor	Requires third-party hypervisor	No	Yes	No	Limited availability in North America	Requires third-party hypervisor	No	No	No	No	No	No
Accelerated compute (servers)	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Cloud-native solutions (deployable from cloud marketplaces)	Yes	No	No	Yes	No	Limited availability in North America	No	Yes	Yes	Yes	Yes	Yes	Yes
Purpose-built backup appliances	Yes	No	No	Yes	No	Yes	No	No	No	No	No	No	No
Network switches	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Professional services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Total Al-ready solution categories from vendor	12	9	5	8	5	10	3	7	5	5	7	8	7

### **Endnotes**

<sup>&</sup>lt;sup>3</sup> Based on a study by Prowess Consulting comparing a Dell Technologies solution to an Amazon Web Services® (AWS®) solution as of April 2025.



#### **Legal Notices and Disclaimers**

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<sup>&</sup>lt;sup>1</sup> McKinsey & Company. "Superagency in the workplace: Empowering people to unlock Al's full potential." January 2025.

<sup>&</sup>lt;sup>2</sup> Huawei provides HCl and cloud offerings that have limited availability in the North American market due to governmental restrictions.