



WD Customer Survey Highlights Growing Focus on Scale, Economics, and Reliability in AI Infrastructure Planning

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Data concludes surveyed enterprises prefer a proven and reliable storage layer when considering AI infrastructure as global data creation and retention reach new highs

SAN JOSE, Calif.--(BUSINESS WIRE)--May 20, 2026-- As AI has evolved into continuous, production-scale data systems, the challenge of managing the explosive growth of data storage requirements is now at the same level as compute challenges. In a new survey of a cross-section of its largest global customers and distributors, Western Digital Corporation (Nasdaq: WDC) found that, amongst other unique market insights, enterprises are prioritizing infrastructure that delivers proven reliability, predictable economics, and the ability to scale data over time.

The findings reinforce a structural shift in AI infrastructure: while compute resources are reused across training and inference cycles, the data generated by AI, such as training datasets, inference logs, embeddings, and outputs, continues to accumulate. As organizations move from experimentation to production AI deployments, infrastructure decisions are increasingly being driven by long-term data retention and operational economics. This creates a compounding demand for storage that persists independent of short-term compute cycles.

Key Survey Findings

Proven Infrastructure Gains Favor: Organizations increasingly favor operationally proven infrastructure as AI deployments scale.

- 66% of respondents say they have deprioritized or are considering deprioritizing new technologies in favor of infrastructure that delivers consistent reliability and predictable performance at scale

Reliability and AI Workloads Tie as Top Infrastructure Priorities: As AI scales, the focus is shifting toward throughput-driven infrastructure optimized for sustained data movement at scale. This approach prioritizes reliability, consistency, and efficiency over latency to minimize operational burden.

- 69% of respondents prioritize supporting AI training and inference workloads
- 69% of respondents prioritize improving reliability and availability
- Latency optimization ranked lower (7%) than scalability, reliability, and operational efficiency among respondents

Capacity Expansion and Cost Efficiency Drive Infrastructure Planning: As AI data volumes grow, cost and capacity considerations are central to long-term AI infrastructure planning and continuous AI operations, reflecting a shift towards infrastructure planning that is focused on long-term scalability, operational efficiency, and AI data growth.

- 87% of respondents prioritize capacity expansion and total cost of ownership (TCO) optimization

Economics Drive Storage Decisions: Economics and scalability remain primary drivers of large-scale storage architecture decisions, highlighting the growing importance of tiered storage architectures that balance performance and cost across the AI data lifecycle.

- 74% of respondents cite TCO, capacity and scalability as primary advantages of HDD-based infrastructure

HDD-Based Infrastructure Remains the Foundation of AI-Driven Data Growth: HDDs continue to represent the majority of storage capacity mix in many data center environments, particularly as organizations plan for exabyte-scale data environments and long-term retention requirements.

- 70% of respondents with visibility into their storage mix report operating HDD-majority infrastructure (more than 50% of total storage)
- 35% report environments where HDDs represent more than 75% of total storage capacity

"HDDs remain part of our long-term strategy because they deliver reliable, scalable storage at a lower cost, making them ideal for large data volumes and long-term retention," said Abish Mohamed, Amstergi Middle East.

"HDD is not a legacy product, but it is a strategic capacity solution. HDD is also ideal for data growth and delivers the lowest cost per TB in the market. The future is not HDD vs SSD, but HDD and SSD," — Anonymous Survey Respondent.

What This Means for AI Infrastructure

The survey results indicate that many organizations are designing infrastructure to support continuous AI data systems — not just discrete workloads or short-term experimentation. The findings reinforce a broader industry shift: AI infrastructure is increasingly being designed as a long-lived data system, not simply a high-performance compute environment.

"AI is fundamentally a data systems challenge, not just a compute challenge. Our customers are on the front lines of solving it, and their needs directly shape our innovation roadmap and the technologies we build for the AI era and beyond," said Ahmed Shihab, Chief Product Officer, WD. "While compute is reused, data persists — and grows. The organizations that win in the next phase of AI will be the ones that build infrastructure designed for continuous data systems at scale, not just peak compute performance."

"HDDs stay in a long-term strategy because they solve a problem that newer technologies still don't beat on economics and scale. In simple terms: they're the cheapest, most reliable way to store huge amounts of data for a long time. Even as SSDs dominate performance-critical workloads, HDDs remain unmatched for bulk storage," — Anonymous Survey Respondent.

Survey Methodology

The findings are based on a WD survey of a mix of 200 of its top global customers in the hyperscale cloud, CSP, and enterprise segments conducted in 2026. Eighty respondents represented organizations responsible for enterprise infrastructure strategy, data center operations, and storage architecture. Individual survey questions received varying response totals.

About WD

WD, also known as Western Digital, builds the storage infrastructure that powers certainty in the AI-driven data economy. At the forefront of innovation, WD partners with the world's leading hyperscalers, cloud service providers, and enterprises to enable reliable storage solutions that are proven and trusted at scale. Driven by a culture of innovation and execution, WD helps customers store, protect, and use the world's data with confidence. Follow WD on LinkedIn and learn more at www.wd.com.

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Media Contact:

WD.MediaInquires@wdc.com

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