HOW ENTERPRISES ARE MODERNIZING THEIR DATA **CENTERS FOR AI READINESS**

Al data center strategies are now central to business success. As Al transforms operations across the enterprise, data center modernization becomes essential to support growing workloads and unlock new capabilities. Explore the three stages of maturity to identify where you stand, and what it takes to advance on the path to enterprise AI readiness.

MOST ENTERPRISES ARE STUCK IN THE MIDDLE

New research reveals a clear divide in AI data center maturity and enterprise AI readiness. While a small group is already positioned for Al-scale transformation, most are still modernizing—and some haven't even started. The longer organizations delay, the harder it becomes to compete at scale.

DATA CENTER MODERNIZATION FALLS INTO THREE MAJOR SEGMENTS



are data center Leaders1



Challengers1

of organizations

are data center Observers1

LEADERS

Leaders have done the hard work of data

AHEAD OF THE CURVE

center modernization in the past two years, achieving enterprise AI readiness.

More than

of enterprises will have used

generative AI technology, either through API and models or applications deployed in their production environments.2

ADVANTAGES

- Ready to deploy AI at scale Lower operational costs
- through automation Greater agility and business
- alignment enable faster innovation

RISKS Integration complexity across

legacy systems

- Technical debt from earlier decisions can drive unexpected overspend
- Underestimating cloud costs

CHALLENGERS

of organizations say that infrastructure limitations either currently prevent or will prevent

them in the future from retraining

Al models more frequently.3

CLOSING THE GAP Challengers are making progress towards enterprise AI readiness, modernizing their

RISKS

priorities and resource constraints.

Al data centers while balancing competing

Learning from early adopters to avoid costly missteps

ADVANTAGES

- Improved stability and cost control rrough proven technologies More flexibility to adopt best
- practices and scale strategically

Difficulty proving Al's return on investment (ROI)

nd business prioritie Infrastructure may limit AI model

retraining and performance

Misalignment between IT

Only

AT RISK OF FALLING BEHIND Observers are in the earliest stage of

OBSERVERS

the next two years.

ADVANTAGES

Al-centric infrastructure

high impact use cases

enterprise AI readiness and data center

modernization, with plans to upgrade in

of Observers believe their IT infrastructure is fully adequate to support their AI plans.1

Delayed modernization widens

Legacy systems increase operational

costs and integration challenges

RISKS

Lower risk of early adoption missteps

Can focus resources on proven,

Opportunity to leapfrog with modern,

- THE PATH TO LEADERSHIP There's no "one-size-fits-all" approach to data center modernization. Each organization

Lack infrastructure to support Al workloads at scale

the competitive gap

SUCCESS STORY: KT CLOUD

while significantly reducing cost.

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both AI innovation and execution.

MODERNIZING IN PLACE REFACTORING AND SHIFTING Enhancing existing on-premises or hybrid Rebuilding applications using cloud-native infrastructure to support AI workloads frameworks to enable greater scalability, without a full re-architecture. agility, and AI performance.

must shape its strategy around its infrastructure realities, enterprise Al readiness, and long-term priorities. Advancing toward leadership means selecting a path that supports

KT Cloud (formerly Korea Telecom) partnered with AMD and Moreh to launch a scalable AI platform powered by over 1,000 AMD Instinct™ MI250 GPUs. This architecture delivered the performance and efficiency needed to support large-scale language model training

reduction in GPU cloud service costs⁴

performance improvement for large-scale

model training4

Up to

higher throughput per dollar vs. NVIDIA4

In terms of cost-effectiveness, the AMD Instinct-based cluster using Moreh software exhibited 1.9 times higher throughput per dollar compared to the NVIDIA cluster while improving results by up to 117%.4

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JOOSUNG KIM VP OF KT CLOUD

EXPLORE MORE? Explore the full eBook to see how AMD powers enterprise AI readiness through scalable, modernized data

WANT TO

center solutions. **GET THE EBOOK**

¹AMD, <u>S&P Global Market Intelligence</u>, 2025.
²Gartner, More Than 80% of Enterprises Will Have Used Generative AI APIs or Deployed Generative AI-Enabled Applications by 2026, 2023. Wanguard Report, The Newest Workloads Will Be Heterogeneous and Cloud Native, 2023. ⁴AMD, KT Cloud Case Study, 2024.