

5 KEY ELEMENTS OF AN AI-CAPABLE INTELLIGENT DATA INFRASTRUCTURE

TURBOCHARGE YOUR AI PROJECTS WITH AN INTELLIGENT DATA INFRASTRUCTURE

The AI revolution has transformed IT priorities overnight. Businesses that want to stay in the lead must be able to manage large, complex, data-intensive AI apps and workloads without a hitch.

But this innovative challenge brings with it distinct opportunities, and a smart, deliberate approach to using, storing, and protecting data can keep you ahead of your competitors—alongside your customers—in the AI race.

Ahead, we cover the five key elements you need for an AI-ready intelligent data infrastructure.

Inability to access data due to infrastructure is the #1 reason for AI project failure¹

1 DESIGN A DYNAMIC, EXTENSIBLE DATA PIPELINE

When it comes to AI, an intelligent data infrastructure does more than store data; it should also support efficient data flow that's customized for AI-specific tasks. This enables you to easily transfer models and data from on-premises to the cloud and back again as needed. A dynamic, agile infrastructure also makes data accessible and easy to analyze by accommodating various data types.

TAKE ACTION: Build a data infrastructure that's not just a hub, but an AI powerhouse built with intelligence. In addition to supporting every stage in the AI data pipeline—from collecting and cleaning to training and deployment—your infrastructure should enable more data to move quickly across the pipeline, from edge to core to cloud. This ensures high performance, reliability, scalability, and cost-effectiveness.

OVER 63% of global businesses say their storage needs major improvement or a complete overhaul to meet the needs of AI¹

2 SET YOUR SIGHTS ON STRATEGIC SCALABILITY

The relationship between AI and data isn't just about numbers; it's also about quality and efficiency. Despite boosting AI performance, massive datasets make significant computational demands and can cause issues such as overfitting. This is especially pertinent when it comes to generative AI, whose tremendous data output can place unprecedented strain on your system.

For sustainable AI growth, organizations should consider an efficient data infrastructure that can handle big, diverse datasets while smoothly integrating with existing IT landscapes.

TAKE ACTION: Invest in an advanced data management architecture specifically designed for AI scalability. Aside from data quantity, prioritize data quality, availability, and effective integration with your enterprise environment, this multifaceted approach is key to scaling AI projects without sacrificing performance.

UP TO \$4.4 TRILLION² Generative AI's potential annual contribution to the global economy

3 DEMYSTIFY DATA MANAGEMENT

Data management shapes where and how data lives. It also determines how data is labeled and organized. Your infrastructure should make data and workloads easy to move, manage, protect, and secure. But these tasks can be muddled by complexity. Look out for too many tools, too many skill requirements, too many silos. Any of these can stall AI projects.



Take IoT powerhouse Pong Yuen as an example. Unified control allows it to build an approved AI cluster with preconfigured solutions that are right-sized for the most common use cases. This enables the minds behind the metaverse to get their workloads up and running quickly and easily.

TAKE ACTION: Piecemeal tools and solutions are not your friend. To simplify operations and drive progress, look to native cloud integration, familiar resources, and unified management.

Success remains elusive. 57% of US execs report feeling overwhelmed by AI integration³

4 PRIORITIZE CYBER RESILIENCE

High-stakes data calls for versatility, ironclad, and comprehensive protection—especially in our AI era. To keep you ahead of threats, your security should safeguard data with built-in real-time cybersecurity and anomaly detection. It should use scalable data snapshots to enable versioning and traceability of multiple AI models in production, as well as integrate classification and insight to meet data privacy and governance policies. And it should fortify your cyber defenses with AI- and ML-based ransomware protection and guaranteed recovery.

TAKE ACTION: Set your AI projects up for success with robust security that automates scans, analyzes, and safeguards data across your hybrid multcloud environment. Opt for a solution with built-in access controls, versioning, and traceability.

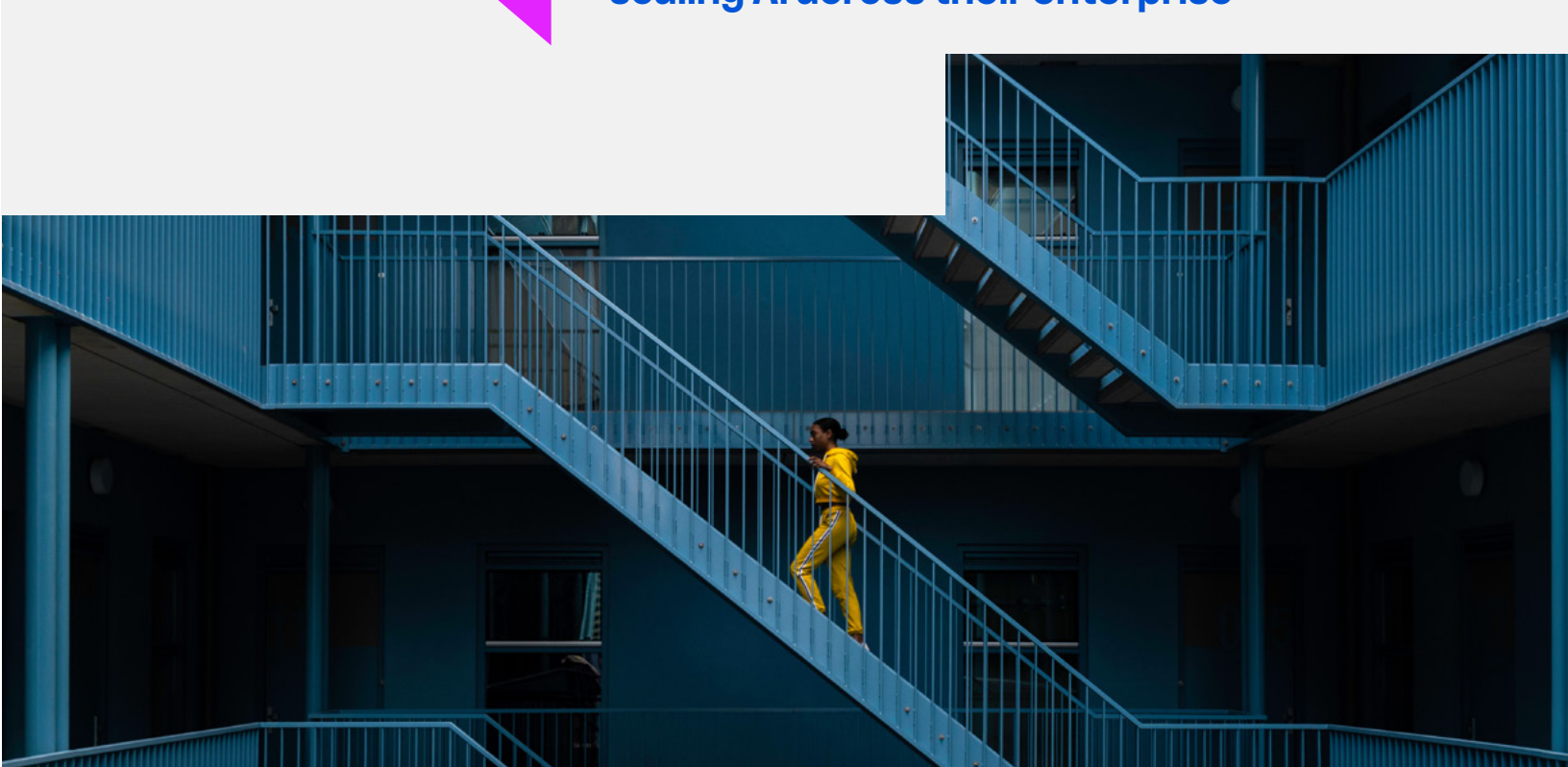
42% of global IT leaders doubt their team's ability to implement AI⁴

5 LEVERAGE AI EXPERTS

You wouldn't try building a city without engineering expertise. Same goes for building an AI-ready data infrastructure. Invest in AI professionals who have the specialized knowledge and skills many organizations lack. The right experts will keep you up to speed in our rapidly evolving digital world.

TAKE ACTION: Plan for AI adoption and scale by assessing business priorities and internal resources. Consider increasing your IT staff, and identify needed skills and roles early on. Partner with external AI experts to fill in-house knowledge gaps. Choose a vendor that understands the ins and outs of hybrid cloud—one that can streamline data bottlenecks and help you get going immediately.

85% of IT leaders worldwide are seeking to reap the benefits of AI,⁴ but only 21% of global organizations feel close to scaling AI across their enterprise¹



AI is only as good as the data that fuels it. NetApp® gets that.

To unlock the full potential of AI, it's important to think of your data infrastructure as a dynamic, AI-focused powerhouse. Prioritize scalability that values data quality as much as quantity. Take proactive measures to ensure your strategy offers both visibility and flexibility. Simplify your operations by avoiding fragmented solutions and opting for unified data management systems.

That might sound like a lot. But you don't have to go it alone. NetApp can turbocharge your AI projects with an intelligent data infrastructure that enables seamless management across every stage of the AI life cycle. With a common operating environment across all your data, everywhere, you can accelerate cutting-edge initiatives and maximize performance for model training and analytics to drive better results with confidence.

We make it easy to hit the ground running with workshops, validated solutions, and simple-to-use blueprints that enable you to effortlessly transform raw data into actionable insights.

Tune in to our newest webinar with NVIDIA and IDC, "The AI Era," to learn more about our AI maturity white paper with IDC and how NetApp can help you capitalize on AI.

Discover more NetApp solutions that give your AI projects an edge.

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¹IDC. "Enabling AI Transformation with Intelligent Data Infrastructure." March 2024.
²McKinsey Global Institute. "AI could increase corporate profits by \$4.4 trillion a year, according to new research." July 7, 2023.
³edX. "Navigating the Workplace in the Age of AI." September 14, 2023.
⁴Salesforce. "85% of IT Leaders See AI Boosting Productivity, but Data Integration and Overwhelmed Teams Hinder Success." January 23, 2024.