



# Go from silos to seamless, chaotic to unified

Five ways to optimize your AI on a unified data foundation



## Today's AI imperative: Quality data in, better insight out

Businesses everywhere are betting big on AI, with nearly 75% prioritizing it over all other digital investments, according to Accenture.<sup>1</sup> And for good reason—AI promises to drive innovation, boost productivity, and create new revenue streams. But success with AI doesn't happen by chance. It depends on how well you can harness your data.

The problem? Not all data is created equal. Bad data—outdated, incomplete, mislabeled, or insecure—can ruin even the best machine learning models. If your data quality is poor, your AI results will be too.

The solution is straightforward: Your data needs to be clean, organized, and ready to use. But producing the large volumes of high-quality data that today's AI workloads demand takes time and expertise—resources that are often in short supply.

So how can you know that your data is up to the task? Follow these five steps to improve data operations and accelerate your AI success

### 1. Establish smart data governance policies

You need a strong data governance framework to confirm your data is well-defined and organized before being used in algorithms or large language models (LLMs). This means asking key questions: What type of data is it? Where did it come from? Does it fit your business needs? How old is it? Where should it be stored?

Good data governance isn't just about organization—it's about enabling AI models that are powered by secure, trustworthy data. This also helps you stay ahead of privacy laws and regulations, like GDPR, which may require you to track where data came from and how it's been used.

While software tools can help automate governance, it's ultimately a people-driven process that should involve leaders like a CTO, CDO, or Chief AI Officer. Technology alone can't determine which data is most valuable for achieving your AI goals.

To get meaningful insights from AI, your data must be relevant to your business needs. That's why it's essential for people who understand your organization's AI strategy to set the rules for how data is managed.

<sup>1</sup> [Reinventing Enterprise Operations](#), Accenture, May 2023

## 2. Simplify data management with a global namespace

To optimize your data for AI, focus on simplifying how you manage your global data estate. One effective approach is building a data fabric with a global namespace — for a unified system that enables seamless data federation, allowing users to query and access data across different storage locations without data movement. Think of it as a single snapshot of every data asset, consistently named and easy for AI developers to access.

A global namespace makes it simple for developers to find and use data, no matter where it's stored. This bird's-eye view not only maps all your data but also reduces waste. Today, a significant 68% of data available to enterprises is left untapped.<sup>2</sup> Making data visible and accessible presents a considerable opportunity for your business to tap into valuable insights, drive innovation, and gain a competitive edge — while improving the accuracy of your AI-powered decisions.

## 3. Create a flexible, open, and portable data platform

Enterprise data today is fragmented — stored in different places, formats, and systems. Whether structured or unstructured, internal or external, it often requires multiple APIs that don't always work together.

The solution? Consolidate your data with a unified data fabric. It provides an intelligent data plane that delivers on the needs of the hybrid estate through radically simplified management, control, and governance for analytic and AI applications across all enterprise storage assets.

In this way, you can conquer today's hybrid challenges by replacing multiple point products with a single solution optimized for hybrid data analytics. This helps users access, manage, organize, and govern enterprise data, across a variety of formats — in a single, consistent, easy to use, edge-to-cloud data plane that's optimized for AI and analytics workloads. This kind of unified API platform isn't just about meeting today's AI needs. It's about staying ready for the future. With support for files, objects, streams, tables, and vectors, it allows your data strategy to grow alongside your business.

## 4. Build out your data estate's scalability

AI runs on data, but training models like generative AI's LLMs require massive storage to handle the huge workloads. Managing this data becomes increasingly more challenging as data generation accelerates. By 2026, the amount of data created annually is expected to more than double from 2022 levels, with enterprise data growing twice as fast as consumer data, according to IDC.<sup>3</sup>

To speed up data collection, preparation, and deployment, you need a scalable data management solution that works across hybrid cloud environments.

Hybrid cloud is one of the most cost-effective and scalable options for managing the exabytes of data powering AI. Unlike expensive public cloud solutions, hybrid cloud spreads data across on-premises systems, the edge, and the cloud, meeting the growing demands of AI workloads.

## 5. Accelerate data pipelines to fuel AI models faster

Data loses value quickly, starting to decay the moment it's created. Depending on how you use it, its value could drop within seconds, hours, or days. To get the most from your data, you need to make it available as fast as possible.

Yet, 76% of organizations say their current data management can't keep up with business needs.<sup>4</sup> Streaming solutions built into a unified data platform can help. Once your AI models are trained, the challenge is keeping them fed. By switching to a real-time streaming format, you can keep data flowing seamlessly.

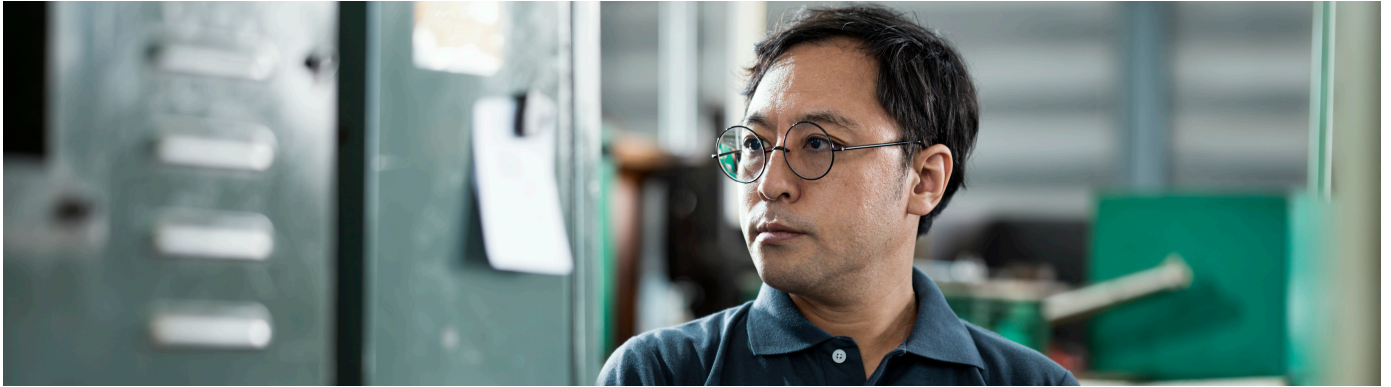
Faster data ingestion improves quality by giving developers more time for cleansing and preparation. While automation tools can help, data quality is too important to leave entirely to algorithms. With the right data solutions, you can count on high-quality data for fast, flexible, and secure AI deployment.

Data growth certainly isn't slowing. Quite the opposite. To prepare, you need a strong data foundation. A data fabric can unify your hybrid cloud, support multiple data formats, scale with your business, and strengthen your data governance for security and trust.

<sup>2</sup> [Unleashing the Power of Data: Study Shows 2/3 of Company Data Goes Unused](#), September 2024

<sup>3</sup> [Global DataSphere](#), IDC, August 2024

<sup>4</sup> [Being a Data-First Leader Continues to Matter](#), Enterprise Strategy Group, October 2023



## Learn more at

### [HPE Data Fabric Software](#)

Build a unified data foundation for AI by integrating various data sources and providing seamless data access

### [HPE GreenLake for File Storage](#)

Accelerate AI and other data-intensive workloads with enterprise performance at scale

### [HPE Alletra Storage MP X10000](#)

Unleash the power of unstructured data with data intelligence, enterprise performance at scale, and simple-to-manage object storage

[Visit HPE.com](#)

### [Chat now](#)

© Copyright 2025 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

a50013258ENW

HEWLETT PACKARD ENTERPRISE

[hpe.com](#)

