



The AI-Ready Enterprise:

The CIO Vision for Modern Data Access in 2026



A GUIDE FOR **CIOs**

Executive Summary

Enterprise advantage in 2026 will not be defined by infrastructure alone — it will be defined by how quickly organizations can access, share, and activate their most valuable data.

AI initiatives, hybrid cloud platforms, and real-time analytics are accelerating. Yet much of the world's most critical enterprise data still resides inside systems built decades ago. CIOs are under pressure to modernize without disruption: preserve the reliability of core platforms while unlocking innovation at cloud speed.

The question is no longer whether to modernize. The question is how to build an AI-ready enterprise without breaking the systems that run the business.

This paper outlines the architectural shift redefining enterprise data access, the priorities CIOs must address in 2026, and the practical framework for transforming legacy platforms into engines of innovation.

The 2026 Reality: Data Is the Bottleneck

Enterprises do not lack infrastructure. They lack **frictionless access to trusted data**. Across industries, CIOs report the same challenges:

- AI projects stalled by inaccessible or siloed data
- Analytics initiatives constrained by brittle integration pipelines
- Storage costs rising faster than innovation budgets
- Risk exposure from legacy backup and recovery models
- Talent gaps around specialized legacy tooling

- Governance complexity across hybrid environments

The problem is not the mainframe. The problem is **how data moves — or fails to move — across environments.**

Modern enterprises are hybrid by design. The winning architecture in 2026 is not “cloud vs. mainframe.” It is **mainframe and cloud working as a unified execution platform.**

The Architectural Shift: From Systems to Data Platforms

CIOs are moving away from infrastructure modernization as a hardware conversation and toward modernization as a **data architecture strategy.**

The new model prioritizes:

- **Real-time data access over batch pipelines:** Organizations cannot wait hours or days for replicated data snapshots. AI, fraud detection, personalization, and operational analytics require live data.
- **Hybrid execution without forced migration:** The most resilient enterprises modernize incrementally, not through risky “big bang” rewrites.
- **Cloud-scale storage without mainframe disruption:** Storage modernization must reduce cost and increase elasticity without destabilizing mission-critical workloads.
- **AI readiness as a design principle:** Modern infrastructure must assume that analytics and AI will consume enterprise data continuously.
- **Governance without fragmentation:** Security, compliance, and auditability must extend seamlessly across platforms.

This is not a tool problem. It is an architecture problem.

What CIOs Are Prioritizing in 2026

AI-Ready Data Pipelines

CIOs are under pressure to feed AI models with governed, high-quality enterprise data. Legacy integration approaches are too slow, too brittle, and too expensive.

Organizations need:

- Structured data delivery into AI platforms
- File-based data pipelines for hybrid workflows
- Real-time shared data access across environments
- Storage that scales with AI workloads

Storage Modernization Without Risk

Traditional storage strategies were built for a different era. Enterprises now demand:

- Cloud elasticity without application rewrites
- Tape and archive modernization
- Lower infrastructure costs
- Faster recovery and resilience
- Storage that behaves like native mainframe resources

Incremental Modernization

The most successful CIOs are not replacing the mainframe. They are **extending it**.

Modernization in 2026 is about coexistence:

- Run core systems where they are strongest
- Unlock data where innovation happens
- Avoid forced migrations that introduce risk

The VirtualZ Framework for the AI-Ready Enterprise

VirtualZ provides a no-code data access platform that enables enterprises to modernize without disruption. Each product addresses a specific architectural need — together forming a complete modernization framework.

PropelZ™ — Structured Data Delivery

PropelZ™ securely extracts and delivers enterprise data into modern platforms, including AI systems, analytics engines, and databases.

Use cases:

- AI and machine learning pipelines
- Snowflake, Databricks, and analytics platforms
- Report migration
- Tape-to-cloud modernization
- Unified management data access

“PropelZ is a very straightforward install... ready to go in just a couple of hours.” — Jerry Edgington, Pelleria

FlowZ™ — File Movement and Hybrid Workflows

FlowZ™ enables high-speed sharing of mainframe-generated files with cloud and on-prem environments.

Use cases:

- Batch data workflows
- Archive modernization
- Tape replacement strategies
- Hybrid DevOps pipelines
- Backup and file mobility

FlowZ removes the complexity of disk and tape emulation while enabling modern file-based architectures.

Lozen™ — Real-Time Shared Data Access

Lozen™ enables cloud and distributed applications to read and write live enterprise data without moving it.

Use cases:

- Incremental application modernization
- Cloud migration without data replication
- AI systems accessing live records
- Shared hybrid workloads

“Lozen integrated smoothly, ensuring secure, real-time data access.”
— Gilberto Biondo Junior, AWS

Zaac™ — Virtualized Enterprise Storage

Zaac™ virtualizes disk and tape storage, allowing cloud or SAN resources to behave like native enterprise devices.

Use cases:

- Instant mainframe storage
- Cloud-backed DASD and tape
- Business continuity and disaster recovery
- Archive modernization

“Zaac brings flexible storage options to the mainframe without compromising security or reliability.” — Dale Vile, Freeform Dynamics

Industry Validation

VirtualZ's approach is recognized across the industry:

- **CRN** named VirtualZ one of the *50 Coolest Storage Vendors*
- **Freeform Dynamics** highlighted Zaac as redefining enterprise storage thinking
- **ISG Provider Lens®** positioned VirtualZ as a Contender in modernization and consulting categories

These recognitions reflect growing enterprise demand for modern data access architectures.

The CIO Mandate for 2026

The enterprises that lead in 2026 will not be those that abandon legacy systems. They will be the ones that unlock them.

The AI-ready enterprise is built on:

- Real-time access to trusted data
- Hybrid execution without disruption
- Elastic, modern storage architecture
- Incremental modernization
- Unified governance

Modernization is no longer a migration project. It is a data strategy.

Conclusion

CIOs are entering a new era where data access defines competitive advantage. The organizations that succeed will treat modernization as an architectural discipline, not a one-time transformation.

VirtualZ enables enterprises to modernize safely, incrementally, and at cloud speed — turning legacy platforms into engines of innovation.

The future is not about replacing what works.

It is about turning it into AI-powered advantage.



VirtualZ Computing

Your AI Needs Data.
We Deliver All of It. Instantly.