Everest Group®

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Operationalize AI at Scale through Data and AI Management Solutions

Contents

Introduction

Enterprises across industries are grappling with a dual imperative: harnessing the power of AI while streamlining hybrid environments and meeting data sovereignty requirements. As data volumes surge and AI workloads demand ever-faster decision cycles, legacy and in-house systems fall short not just in performance but also in adaptability. Even widely used data and AI platforms falter at the complexity and scale.

Effective data and AI management is no longer optional. It is a business imperative. To stay competitive, enterprises need an integrated and optimized data and AI management platform that goes beyond raw speed to accelerate time-to-value and leverage AI at scale.

An ideal data and AI management platform should unlock faster time-to-value from AI investments, simplify data operations, lower costs, and enable high sovereignty controls.

This report explores the evolving enterprise IT landscape and the growing need for intelligent data and AI management. Particularly, we will examine:

- Key challenges of complex data management and how evolving AI demands are shaping enterprise needs
- Blueprint of an ideal data and AI management solution
- The value of ideal data and AI management platforms against enterprise in-house approaches

86% of enterprises are planning AI investments in 2025. However, 85% of the AI proof-of-concepts so far have failed to reach the production stage.

Summary of key findings

Enterprises are struggling with data and AI complexity.

Fragmented and unstructured data across environments is overwhelming enterprise IT teams. Legacy workflows are causing delays, while a lack of centralized control and observability is slowing productivity. Challenges such as data preparation, governance gaps, and sovereignty hurdles are further constraining AI development and value creation.

DIY and legacy systems are falling short.

In-house and traditional platforms were not built for the AI-era demands. They struggle to keep up with the scale, velocity, and diversity of modern data. These solutions require extensive manual orchestration and lack the automation, scalability, and native AI capabilities needed to support production-grade AI use cases.

An ideal data and AI management platform-based solution simplifies complexity and accelerates AI-readiness.

To bring sovereign AI into production and unlock business value, enterprises need a platform that unifies control across environments and embeds automation across security, observability, data preparation, model deployment, and production. With features such as automated embedding, custom knowledge bases, off-prompting capabilities, and observability, the platform ensures AI-ready data, scalable operations, and accurate inferencing.

The value of platform-based approaches over DIY approaches is in speed and simplicity.

Ideal platform-based solutions can eliminate approximately 40-43% of the steps, 66-69% of the effort, and 56-59% of the complexity typically required to develop an in-house data and AI stack. Compared to custom builds, they significantly reduce time across all stages, from strategy and design to deployment and transition, helping teams move from idea to implementation faster, with minimal-to-moderate internal support overhead.

On-ground challenges in enterprise data and AI management

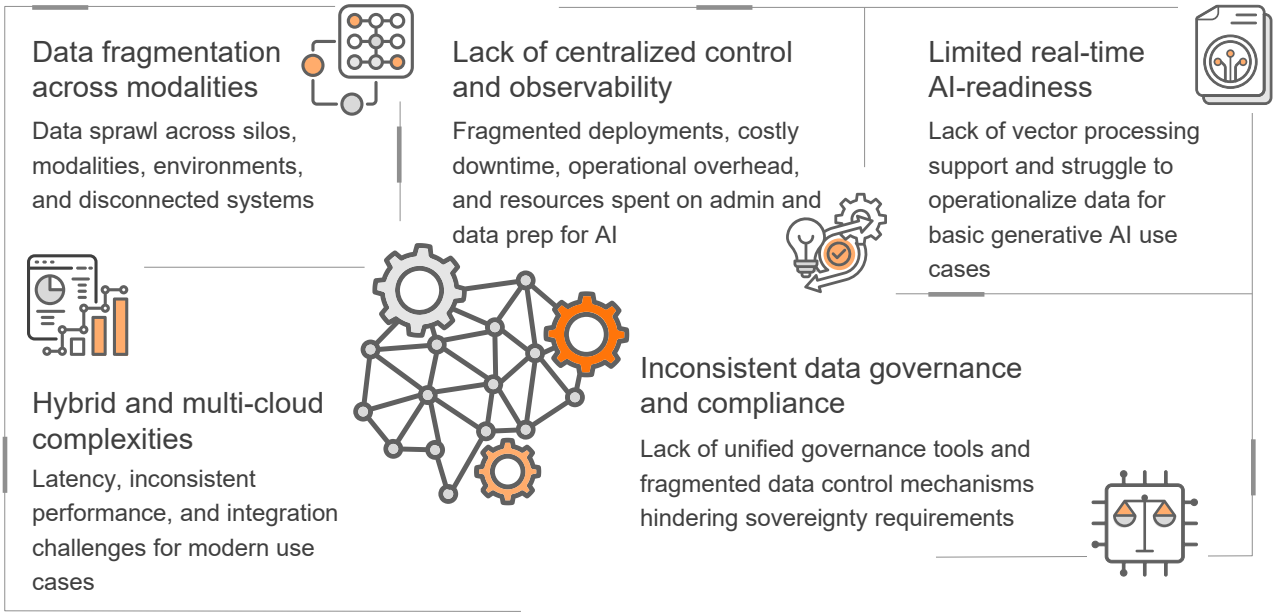
As digital transformation accelerates and AI becomes central to business strategy, traditional database infrastructures are buckling under the dual burden of managing massive data volumes and supporting complex AI workloads.

Legacy or enterprise in-house systems, often designed for predictable and structured workloads, are ill-equipped to meet the demands of modern use cases such as real-time personalization, generative AI applications, and large-scale predictive modeling. These systems struggle to accommodate the three Vs of evolving data and AI demands: volume, velocity, and variety.

Exhibit 1 outlines common challenges enterprises face as they aim to future-proof their data and AI management solutions.

Exhibit 1: Key enterprise challenges in data and AI management

Source: Everest Group (2025)



Nearly 60% of enterprises experimenting with generative AI identify data readiness as their top challenge limiting their ability to support unstructured data and modernize workloads.

Blueprint of an ideal data and AI management platform

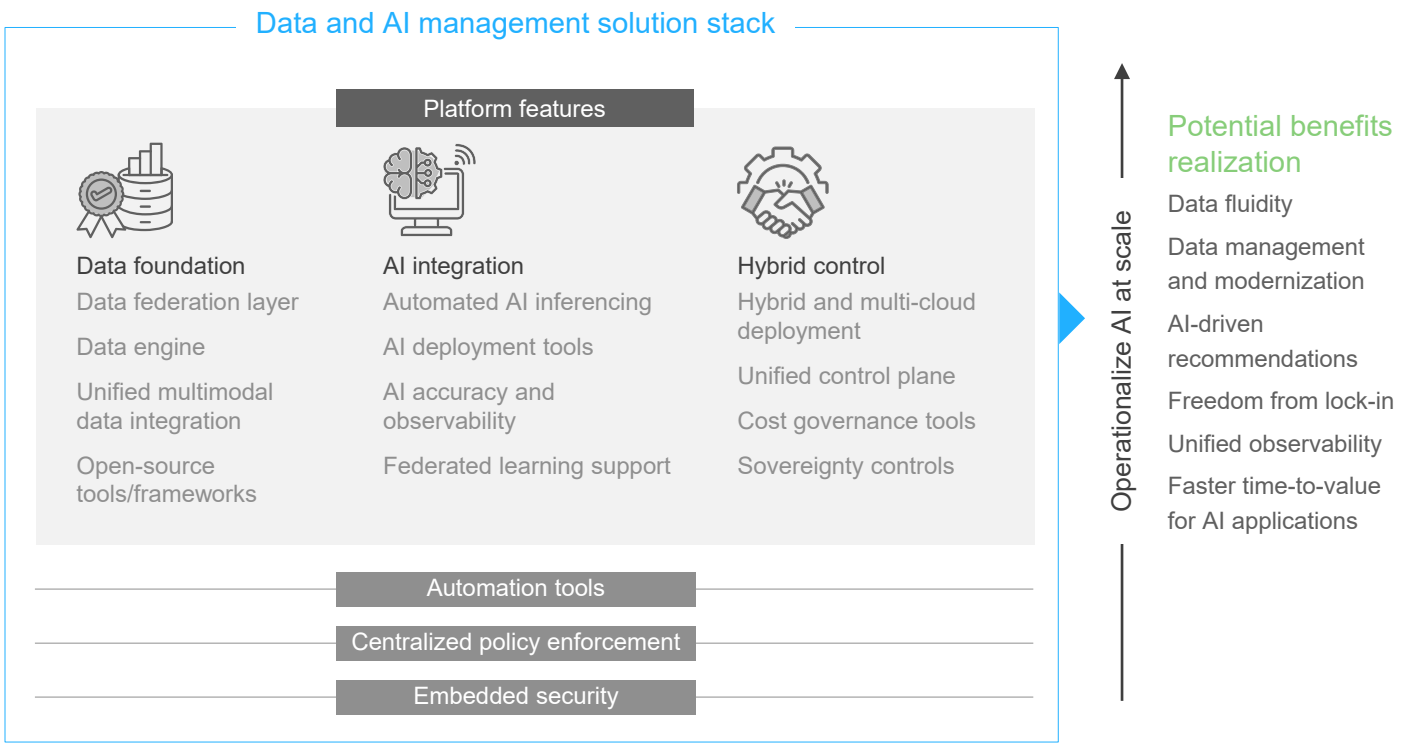
In a data-first world where workloads span regions, cloud and on-premises environments, and data formats, an ideal data and AI management solution begins with seamless data fluidity across multiple environments and platforms, eliminating data movement inefficiencies and operational lag.

Organizations aim to harness their existing data to power production-ready generative AI applications while ensuring data sovereignty and governance. To scale sovereign AI and create business value, enterprises need a data and AI platform that simplifies security, observability, data preparation, model serving, and downstream app publishing.

Exhibit 2 outlines the key architectural components and capabilities that define an ideal enterprise-ready platform.

Exhibit 2: Blueprint of an ideal data and AI management platform

Source: Everest Group (2025)



> "Leading BFSI and retail enterprises increasingly desire a single, unified view of their entire environment, regardless of whether databases are deployed on premises, in the public cloud, or across hybrid setups. They seek comprehensive insights into database health, performance, and security from a centralized control point."
>
> – Leading enterprise survey

An ideal data and AI management solution, built on a portable, cloud-native architecture, empowers enterprises to unlock the full potential of their data by unifying an advanced, multimodal database platform with built-in AI capabilities to accelerate time-to-value. The value delivered is beyond costs and extends to other tangible and intangible business benefits. Key platform features include:

- **Data foundation:** provides the foundational layer for modern enterprise data architecture by combining a data engine, a data federation layer for unified access, and support for multiple data models and structured, semi-structured, and unstructured data types
- **AI integration:** embeds AI capabilities natively within the platform, combining language models with sovereign data to enable sophisticated inferencing in a controlled environment with complete data privacy. With automatic embedding, custom knowledge bases and rules, and off-prompting technology, it ensures AI-ready data, scalable operations, and accurate AI inferencing. Another key feature is a built-in application builder that enables users to rapidly design, test, and deploy AI-driven applications
- **Hybrid control:** empowers enterprises to deploy across hybrid and multi-cloud environments with a unified control plane that provides deep observability and centralized management. Cloud-native automation in a sovereign container enforces consistent policies and governance across the hybrid environment, while also addressing operational resilience

Together, these elements enable a sovereign data and AI platform, allowing enterprises to go from proprietary data to achieving value from generative and agentic AI applications. Through hybrid management and observability across the data infrastructure, these platform solutions provide the agility required to accelerate innovation while maintaining sovereign controls and boosting operational efficiency. The platform approach also helps maximize the value of existing data assets through seamless generative and agentic AI implementation without the need to invest in newer tools and expertise, thus accelerating the transformation speed from data and concepts to AI transforming business.

Value of an ideal data and AI management platform versus enterprise in-house approach

As enterprises scale their data and AI management initiatives, they face a strategic decision: should they build and manage solutions in-house or leverage platform-based solutions?

This section analyzes and compares the value that an ideal data and AI management platform delivers against an enterprise in-house approach. The comparison is based on a representative business case detailed below.

Business case overview

The scenario models a mid-sized BFSI enterprise operating a contact center in the US. The organization is evaluating two approaches: an enterprise in-house solution and a platform-based solution.

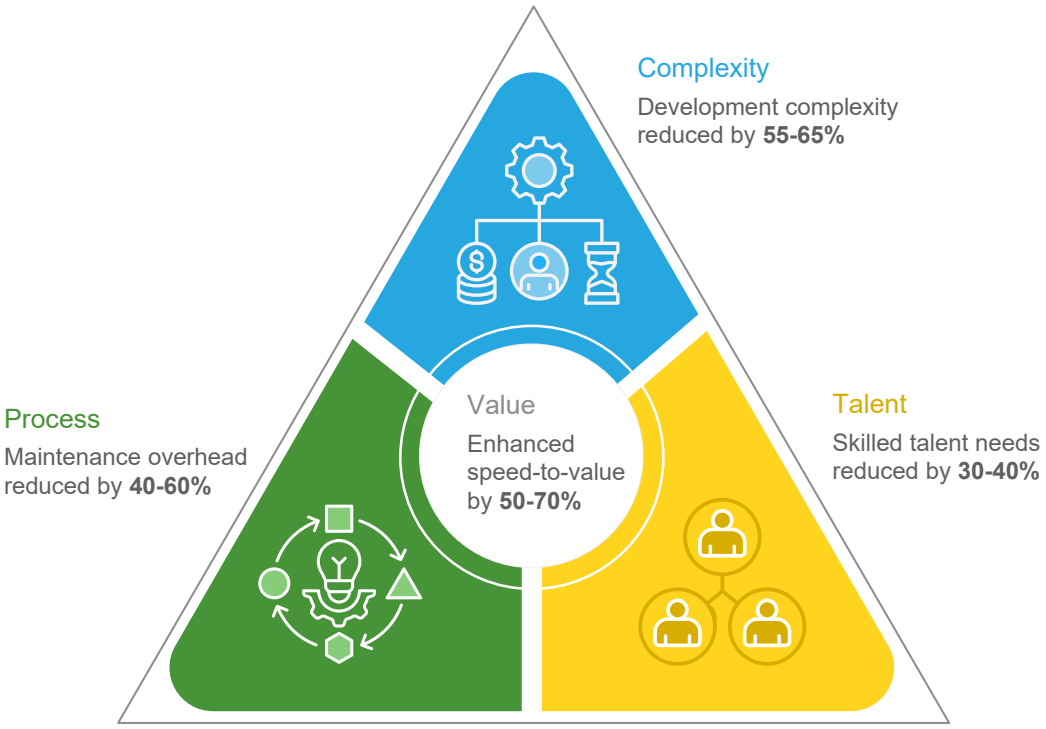
Key points

- This evaluation is conducted over a five-year period, during which all Year-on-Year (YoY) costs and rates are controlled and monitored for consistency
- The contact center currently employs 300 full-time, onshore staff, each working 2,000 hours annually at a standard hourly wage
- The enterprise exhibits medium IT maturity with low AI/ML adoption
- Its data landscape is balanced, with 50% of data distributed between private and public cloud environments and the remaining 50% hosted on premises
- The organization manages data of medium complexity and scale

For the above case scenario, Exhibit 3 illustrates a value triangle that depicts the benefits of leveraging an ideal data and AI management platform-based solution compared to an enterprise-developed in-house solution.

Exhibit 3: The value triangle: benefits of an ideal platform-based data and AI management solution versus an in-house solution

Source: Everest Group (2025)

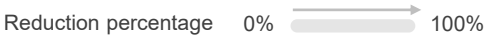


The above triangle depicts the benefits of an ideal platform-based solution across four tenets: value realization, complexity, talent, and processes. This comparison is quantified across the four tenets against an enterprise in-house solution.

Exhibit 4 illustrates how a provider-developed ideal platform-based solution installation reduces steps, efforts, and complexity when compared to an enterprise in-house developed solution.

Exhibit 4: Reduction in steps, effort, and complexity with a platform-based data and AI solution versus in-house development

Source: Everest Group (2025)



Stage	Steps reduction	Effort reduction	Complexity reduction
Planning and design			
Development and engineering / Installation			
Integration			
Testing			
Deployment and scaling			
Post-deployment transition support			
Overall benefit			

From the above analysis, the ideal platform-based solution reduces implementation steps across all stages by 40-50%, effort by 65-75%, and complexity by 55-65% compared to an enterprise in-house build. The development and engineering stage sees a significant benefit, with nearly 90% of steps and 95% of effort eliminated due to a provider-built ideal platform-based solution that is tried and tested and complies with industry standards.

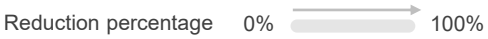
Adopting platform-based solutions can compress a year-long, labor-intensive build into a matter of weeks, delivering faster time-to-value and leaner operations through pre-engineered components and automation. The platform-based approach accelerates time-to-value without compromising on compliance, data sovereignty, performance, or innovation over time.

Based on the base scenario evaluation and a detailed comparison of implementation steps, effort, and complexity, enterprises can expect a TCO reduction of approximately 40-50% over five years when leveraging an ideal platform-based solution as opposed to an in-house solution.

Exhibits 5, 6, 7, 8, 9, and 10 illustrate the steps, efforts, and complexity reduction for each stage by provider-developed ideal platform-based solution installation when compared to an enterprise in-house developed solution.

Exhibit 5: Planning and design: reduction in steps, effort, and complexity

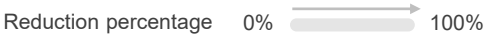
Source: Everest Group (2025)



Step	Effort reduction	Complexity reduction
Identify business objectives and use cases		
Stakeholder alignment and buy-in		
Regulatory requirements analysis		
Data availability and sources assessment		
Technology stack evaluation		
Resource and skills assessment		
Vendor solutions research		
Cost-benefit analysis (build vs. buy)		
Define project scope and requirements		
High-level architecture design		
Risk assessment and mitigation planning		
Timeline and roadmap development		
Budget planning		
Team structure and governance setup		
Data governance strategy		
Security and compliance strategy		
Define success metrics and KPIs		
Stakeholder review and approvals		
Procurement planning		
Change management and user adoption plan		

Exhibit 6: Development and engineering / Installation: steps, effort, and complexity reduction

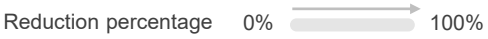
Source: Everest Group (2025)



Step	Effort reduction	Complexity reduction
Setup development environment		
Data ingestion pipeline development		
Data cleansing and preprocessing		
Feature engineering		
Model selection and prototyping		
Model training and validation		
Model fine-tuning and optimization		
Develop model serving interface		
Application UI/UX development		
Database schema design and creation		
Implement business logic/rules		
Implement security controls		
Logging and auditing implementation		
Build data storage management		
Integration interface development		
Workflow/Orchestration development		
Internal API development		
Performance optimization (code and queries)		
Setup CI/CD pipeline		
Developer documentation		

Exhibit 6: Development and engineering / Installation: steps, effort, and complexity reduction (continued)

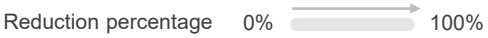
Source: Everest Group (2025)



Step	Effort reduction	Complexity reduction
Code review and quality assurance		
Source control management		
Module integration		
Data anonymization for development/test data		
Environment configuration		
Containerization/Packaging		
Agile sprint planning and iteration management		

Exhibit 7: Integration: steps, effort, and complexity reduction

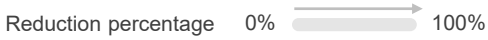
Source: Everest Group (2025)



Step	Effort reduction	Complexity reduction
Integration architecture planning		
Connect to core systems		
Connect to data repositories		
Identity and access integration		
External API integration		
Data consistency and sync		
Integration security implementation		

Exhibit 7: Integration: steps, effort, and complexity reduction (continued)

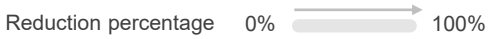
Source: Everest Group (2025)



Step	Effort reduction	Complexity reduction
Integration testing with systems		
Performance tuning for integration		
Integration documentation		
Failover integration setup		
Monitoring integration points		
Audit log integration		
Compliance verification		

Exhibit 8: Testing: steps, effort, and complexity reduction

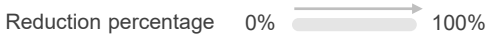
Source: Everest Group (2025)



Step	Effort reduction	Complexity reduction
Unit testing		
Functional testing		
System integration testing		
Regression testing		
Performance load testing		
Stress testing		
Security penetration testing		
Compliance testing		
User acceptance testing		

Exhibit 8: Testing: steps, effort, and complexity reduction (continued)

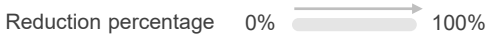
Source: Everest Group (2025)



Step	Effort reduction	Complexity reduction
Model validation testing		
Data quality testing		
Failover/Recovery testing		
Backup and restore testing		
High availability testing		
API contract testing		
Usability testing		
Accessibility testing		
Scalability testing		
Pilot testing		
Third-party audit and certification		
Data migration validation testing		
Soak testing		
Test results review and sign-off		

Exhibit 9: Deployment and scaling: steps, effort, and complexity reduction

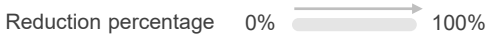
Source: Everest Group (2025)



Step	Effort reduction	Complexity reduction
Production environment provisioning		
Production DB setup and configuration		
Platform deployment setup		
Configuration management		
Monitoring and alerts setup		
Backup schedule configuration		
Disaster recovery setup		
Implement high availability		
Load balancer configuration		
Security hardening		
Performance tuning		
Go-live execution		
Post-deployment verification		
Incident response plan setup		
Scaling strategy implementation		
Deployment documentation		
Handover to operations		
SLA and performance monitoring		

Exhibit 10: Post-deployment transition support: steps, effort, and complexity reduction

Source: Everest Group (2025)



Step	Effort reduction	Complexity reduction
Operations team training		
End-user training		
Runbook and support documents creation		
Establish support SLAs and contacts		
Patch and update management		
Capacity planning and scaling		
User feedback and improvements		
Continuous improvement roadmap		
Platform roadmap and updates management		
Cost optimization		
Periodic system health reviews		
Disaster recovery drills		
Project RoI evaluation		
System decommission plan		

Nearly 50% of enterprises looking to scale AI claim budget constraints as the major roadblock.

Apart from the effort, complexity, and cost benefits, enterprises should also consider other qualitative benefits that an ideal data and AI management platform promises to offer:

- **Built-in cost governance:** Platform solutions have consolidated, built-in cost reporting features, helping enterprises optimize infrastructure spend and prevent cost overruns, often seen in enterprise in-house setups that use multiple, single-purpose databases and tools
- **Unified structured and unstructured data management:** Unlike in-house solutions that struggle with siloed data, platforms natively support the fusion of diverse data types with built-in AI-ready data processing, making modern workloads seamless and scalable
- **Faster time-to-value with embedded AI capabilities:** Platform-based solutions offer value add for generative AI use cases by supporting workloads, vector search, agentic analytics, and AI-driven optimization, eliminating the need to stitch together external tools or custom pipelines
- **Enterprise-grade scalability, reliability, and sovereignty:** Platforms are battle-tested for large-scale, production-grade workloads across hybrid and multi-cloud environments, offering robust support, high availability, and regulatory compliance that enterprise in-house solutions struggle to match

While in-house approaches offer control and customization, they often come with hidden complexities, scalability issues, and slower time-to-value. In contrast, platform-based solutions are designed to deliver immediate value. The real differentiator lies in the ability to operationalize AI at scale, accelerate innovation, simplify management, lower costs, and provide sovereign controls.

Conclusion

The complexity of hybrid AI environments, the exponential growth of structured and unstructured data, and the pressing need for sovereignty demand a foundational shift. In-house and legacy systems can no longer support the modern intelligence needed to compete in the current landscape.

An ideal cloud-native data and AI management platform rapidly accelerates modern workloads, trims both the steps and specialist knowledge for development, converts cost lines into rapid, compounding RoI, and lifts the heavy operational load away from the enterprise IT, freeing teams to focus on strategic work. The outcome is a future-proof platform that turns data into a continuously compounding strategic asset and AI into a scalable, enterprise-grade capability, equipping adopters to innovate faster, operate leaner, and bring a competitive edge in an intelligence-driven economy.

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For more information about Everest Group, please contact:

+1-214-451-3000

info@everestgrp.com

For more information about this topic please contact the author(s):

Mukesh Ranjan, Vice President
mukesh.ranjan@everestgrp.com

Raya Mukherjee, Senior Analyst
raya.mukherjee@everestgrp.com

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