



AI Infrastructure Debt: Strategies for Capacity, Resiliency, and Modernization

• The Infrastructure Reliability Gap [1](#), [2](#)

- **\$108B** in wasted global AI investment each year, tied to weak data foundations that keep 58% of U.S. and Canadian organizations from realizing value.
- **84%** say the complexity of their data infrastructure is growing rapidly or too quickly to manage.
- **84% vs. 48%:** 84% of data-mature organizations report measurable AI ROI vs. 48% of data laggards.
- **50%** say their systems are complex enough that executives would lose sleep if they understood the risks.
- **43%** report having predictive or automated infrastructure operations

• Capacity

- “Inference workloads accounted for roughly half of all AI compute in 2025, according to Deloitte, and are expected to represent two-thirds by 2026, up from just one-third in 2023.”[3](#)

• Resiliency

- “80% of operations teams saying their most recent outage was preventable, and that better processes or management would have caught it.”[4](#)

• Modernization: Three tiers of data maturity:[5](#)

- 41% qualify as Optimized, with resilient infrastructure and clean data actively powering AI operations.
- 24%, remain Emerging: risk-averse, short on skills, and leaning on manual processes that won't scale.
- 35% sit in the gray middle, making marginal progress without the strategy to break out

Sources:

1. [State of Data Infrastructure Global Report](#)
2. [Legacy Data Infrastructure Is Driving \\$108 Billion in Annual Wasted AI Investment, New Survey Finds](#)
3. [How AI Inference Is Reshaping Enterprise Infrastructure](#)
4. [Manage by Exception, Not by Exhaustion](#)
5. [The Gap Between AI-Capable and AI-Ready](#)

