VANNADIUM

Infrastructure for the New Data Economy

Data is becoming the world's most valuable asset—but most systems aren't built to treat it that way. Today, data is siloed, slow, and insecure. Organizations spend billions dealing with inefficiencies, breaches, and unreliable information. At the same time, AI adoption and looming quantum-era threats make the need for real-time, secure, and intelligent data infrastructure more urgent than ever.

Vannadium provides the foundation for the new data economy: ultra-fast, resilient, and programmable infrastructure that gives organizations true control of their data.

Why current Systems Fail

Most organizations rely on data to drive critical decisions, yet the systems that manage it are outdated and fragmented. Information is locked in silos, security is fragile, and access controls are inconsistent, especially in AI-driven environments.

The result is that data is slow, unreliable, and often unsafe, holding back enterprise innovation and exposing governments and businesses to costly risks.

Poor data quality costs organizations an average of **$15 Million** per year.

For Fortune 500's the average is over **$1 Billion** per year

- Global productivity losses: $7.8T annually due to latency and outdated systems (Gallup)
- Healthcare waste: $30B lost each year to interoperability failures (Health Affairs)
- Poor data quality: $3.1T annual cost to the U.S. economy (IBM); $15M per company on average, $1B+ for Fortune 500 (MIT Sloan)
- Rising security risks: Centralized data is an easy target for ransomware, fraud, and AI-driven attacks
- AI adoption bottlenecks: No reliable way to validate data sources or enforce access policies, limiting the move from AI pilots to enterprise-wide adoption
- Lack of ownership and flexibility: Most organizations don't truly control their data or how it's used

The result: data is **chaotic**, **leaky**, and **underutilized**—costing money, time, and lives.

The Solution: Vannadium's Data Infrastrucure Platform

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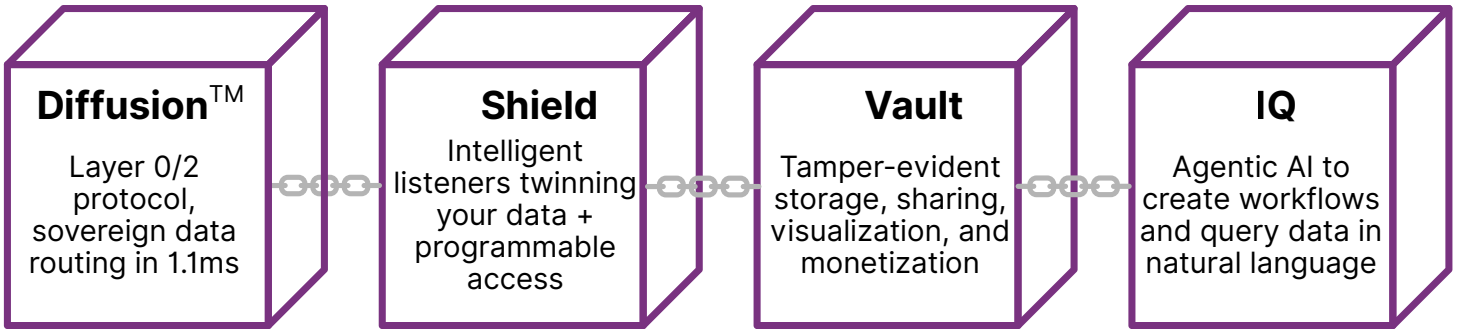
A Breakthrough Solution

Vannadium unlocks the potential of your data

Vannadium's infrastructure makes data fast, secure, programmable, and monetizable without forcing organizations to rip and replace their existing systems.

- **Speed:** Sub-millisecond (1.1ms) transaction speeds ensure real-time access
- **Security:** Immutable records, decentralized redundancy, and end-to-end integrity
- **Programmability:** Smart permissions and policy enforcement at every access point
- **Monetization:** Data becomes a programmable revenue asset with revocable access
- **Future-Proofing:** Guardrails for AI and resilience against quantum and ransomware threats



Key Use Cases

Healthcare: Real-time interoperability across EHRs and medical systems, reducing $30B in wasted costs and improving patient outcomes

Energy Efficiency: Optimized orchestration systems for data centers, reducing wasted energy expenditures

Defense & Government: Secure compartmentalization of data access with dual-use capabilities for defense and public infrastructure

Ransomware Safety Net: Continuous, decentralized backups that make ransomware attacks ineffective

Guardrails for AI: Real-time validation, provenance, and policy enforcement between questions and answers

Data Monetization: Turn data streams into programmable, revocable, and monetizable assets

Chain of Custody: Immutable, secure records for both online and real-world events

Get in touch to make your data work for you Solutions@vannadium.com