



SOLUTION BRIEF

## Data architecture review

Comprehensive evaluation of data infrastructure enabling AI-ready systems, scalable growth, and measurable business impact for enterprise organizations.

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## Solution overview

**Service name:** Data architecture review

**One-line outcome:** Comprehensive evaluation of data infrastructure enabling ai-ready systems, scalable growth, and measurable business impact for enterprise organizations.

**Audience:** Chief Data Officers, VP of Engineering, Enterprise Data Leaders, IT Directors, Business Intelligence Managers

**Partners:** Cloud infrastructure providers, data integration platforms, enterprise architecture consultants

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## Solution snapshot

### **What it does:**

The Gruve Data Architecture Review provides a comprehensive assessment of your organization's current data landscape, identifying strengths, gaps, and opportunities for optimization. Our expert team evaluates your data governance frameworks, infrastructure design, integration patterns, data quality practices, and management processes to deliver actionable recommendations aligned with your strategic objectives. This deep-dive assessment covers both technical architecture and business alignment, ensuring your data foundation supports current operations and future AI and analytics initiatives.

### **Why it matters now:**

Organizations face unprecedented pressure to harness data as a competitive advantage while managing exponential data growth, regulatory complexity, and AI readiness requirements. Legacy data architectures often create silos, limit scalability, compromise data quality, and impede compliance. Modern enterprises require cloud-native, AI-ready architectures that balance governance with autonomy. A strategic data architecture assessment identifies these gaps early, preventing costly rework, reducing security and compliance risks, and enabling faster deployment of analytics and AI solutions that drive measurable business value.

### **Time to value:**

- Go-live in 4–8 weeks
- First value in 2–3 weeks (initial findings and quick wins)

### **Typical ROI:**

- 25–40% reduction in data infrastructure costs through optimization and consolidation
- 30–50% improvement in analytics and AI deployment speed
- 35–60% reduction in data quality issues and reporting errors
- Enhanced regulatory compliance and reduced risk exposure



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reduction in data infrastructure costs through optimization and consolidation



**30-50%**

improvement in analytics and AI deployment speed



**35-60%**

reduction in data quality issues and reporting errors

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## Core value

### **Primary outcome:**

The Gruve Data Architecture Review delivers a clear, actionable strategic roadmap that transforms your organization's data capabilities. Within the engagement, you receive a detailed assessment report, priority-ranked recommendations, a phased implementation plan, and an estimate of business impact. Organizations typically identify 15–25% of data infrastructure spending that can be eliminated through optimization, discover critical data quality issues affecting decision-making, and gain a concrete path to deploying AI and advanced analytics with confidence and speed.

### **Secondary outcomes:**

- Efficiency: Streamlined data pipelines, consolidated redundant systems, optimized cloud spending, and reduced time-to-insight enable your teams to focus on high-value analytics and AI initiatives rather than firefighting data quality issues.
- Risk & compliance: Comprehensive assessment of data security, privacy controls, and regulatory alignment identifies compliance gaps and recommends controls that meet industry standards (SOC 2, ISO 27001, HIPAA, GDPR) without disrupting operations.
- Revenue & business impact: Better data quality, faster analytics deployment, and AI-ready infrastructure enable improved forecasting, customer insights, operational efficiency, and new revenue opportunities through data-driven products and services.
- Experience: Unified metadata management, clear data lineage, and transparent data governance empower business users with trusted, easily accessible data and stakeholders with visibility into data assets and usage across the organization.

### **Why Gruve:**

Gruve combines deep technical expertise in enterprise data architecture with proven experience architecting AI-ready data ecosystems for leading organizations. Our approach uniquely balances technical rigor with business outcome focus—we don't just identify gaps, we design practical, phased implementation paths tailored to your organizational constraints and strategic priorities. Gruve's team brings hands-on experience integrating Salesforce, Microsoft, cloud platforms, and legacy systems, ensuring recommendations are grounded in real-world complexity and proven deployment patterns that your organization can execute with confidence.

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## Key benefits



**Clarified data landscape:** Gain complete visibility into your organization's data assets, systems, and dependencies. A comprehensive data inventory, architecture diagrams, and metadata repository eliminate confusion about data sources, ownership, and usage patterns. Business and technical stakeholders align around a common understanding of data capabilities and limitations, enabling faster, more confident decision-making.



**Reduced costs and complexity:** Identify redundant systems, inefficient storage arrangements, and opportunity for cloud optimization. Typical engagements reveal 20–35% of data infrastructure spending that can be redirected through consolidation, modernization, and rightsizing. Simplified architecture reduces operational overhead and allows IT teams to focus on strategic initiatives rather than maintaining legacy systems.



**Faster AI and analytics deployment:** An AI-ready architecture ensures your data foundation supports advanced analytics, machine learning, and generative AI initiatives from day one. Organizations with architected data ecosystems deploy analytics 2–3× faster and realize measurable ROI within months rather than years, accelerating competitive advantage and business impact.



**Strengthened governance and compliance:** Implement federated data governance that balances autonomy with enterprise consistency, ensuring compliance with SOC 2, ISO 27001, and regulatory requirements (GDPR, HIPAA, etc.). Clear ownership, documented lineage, and automated policy enforcement reduce risk, improve audit readiness, and protect brand reputation and customer trust.

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## How it works

### Tier 1: Comprehensive architecture assessment

**Summary:** The foundation of the engagement is a deep-dive assessment of your current data infrastructure, governance practices, and technical capabilities. Our team conducts structured interviews with business leaders, data engineers, architects, and operations teams to understand your data landscape, strategic objectives, pain points, and constraints. We then perform technical evaluation of your data storage, integration, processing, and governance layers—examining cloud utilization, metadata management, data quality practices, and security controls.

#### Core features included:

- End-to-end data landscape inventory (systems, tools, cloud platforms, data stores)
- Architecture current state documentation (flowcharts, system integration maps, data lineage)
- Assessment of data governance maturity, data quality processes, and security controls
- Evaluation of cloud strategy, scalability, and cost efficiency
- Analysis of organizational structure, skills, and process maturity
- Stakeholder interviews across business, data, and IT functions

#### Typical use cases:

- Organizations undertaking digital transformation seeking to align data strategy with business objectives
- Enterprises preparing for AI and advanced analytics initiatives requiring foundational assessment
- Companies experiencing data quality issues, governance gaps, or rapid growth straining existing systems
- Teams merging data platforms post-acquisition and needing unified strategy

**Key outcome or benefit:** You receive a comprehensive Current State Assessment Report documenting your data architecture, strengths, gaps, and a prioritized list of 15–25 opportunities for improvement. This clarity becomes the foundation for all downstream planning and organizational alignment.

## Tier 2: Strategic roadmap & implementation plan

**Summary:** Based on assessment findings and your strategic priorities, Gruve develops a detailed Future State architecture design and phased implementation roadmap. We prioritize recommendations by business impact, implementation complexity, and dependencies—ensuring your organization addresses high-impact, achievable initiatives first. The roadmap includes specific technology recommendations, organizational changes, process improvements, staffing needs, and realistic timelines tailored to your team's capacity and budget constraints.

### **Core features included:**

- Future state architecture design (cloud-native, AI-ready, scalable, governed)
- Technology stack recommendations aligned with your existing investments and strategic direction
- Phased implementation plan with prioritized initiatives, dependencies, and milestones (typically 12–24 months)
- Change management and organizational recommendations (roles, skills, team structure)
- Cost-benefit analysis and ROI projections for recommended initiatives
- Risk assessment and mitigation strategies for complex implementations

### **Typical use cases:**

- Defining multi-year data modernization programs with clear sequencing and business value
- Selecting cloud platforms and vendors aligned with organizational strategy and constraints
- Planning data governance program rollout with measurable adoption and compliance milestones
- Designing AI-ready architecture supporting generative AI, machine learning, and advanced analytics
- Post-merger data integration and platform consolidation planning

**Key outcome or benefit:** Your organization receives a clear, consensus-driven strategic roadmap that balances business impact, technical feasibility, and organizational change capacity. Executive leadership and technical teams align around shared priorities, reducing debate and enabling faster execution. Estimated implementation costs, timelines, and expected ROI empower you to secure budget and stakeholder commitment for transformational initiatives.

## About Gruve

Gruve partners with leading enterprises to transform data into measurable business impact. Our team brings deep expertise in enterprise data architecture, AI and analytics strategy, cloud modernization, and organizational change. We combine technical rigor with business acumen, ensuring recommendations are both architecturally sound and executable within your organizational constraints. With proven success across financial services, healthcare, manufacturing, and technology sectors, Gruve delivers data and AI solutions that drive growth, efficiency, and competitive advantage.

**Learn more at [www.gruve.ai](http://www.gruve.ai).**