WHITEPAPER

AI MAKES DATA GOVERNANCE AS IMPORTANT AS EVER, THANKFULLY IT'S GETTING LESS EXPENSIVE

CC PACE

Yes, generative AI is amazing, but data governance is required to make it truly transformational. It is not as hard (or expensive) as you might think!

In just a few months, generative artificial intelligence (AI) has demonstrated the promise of radical innovation across all industries. However, as organizations explore AI adoption, the foundational need for high-quality, well-managed data is essential. With data serving as the fuel for advanced systems, maintaining its veracity and fidelity through effective practices, principles, and tools ensures AI and all technologies perform effectively and ethically.

While headlines often focus on AI capabilities, robust data preparation and management are fundamental to the success of these innovations. As organizations accumulate and curate complex datasets, governance provides scaffolding to catalog information, assure quality, enhance security protections, and monitor compliance. Without governance protocols clarifying data decision rights and system monitoring needs, organizations cannot harness the full potential of their data assets. This limits the return on AI investments and exposes firms to inaccuracies, breaches, and ethical risks from misuse. Have you heard of the Samsung Software Engineers Busted for Pasting Proprietary Code Into ChatGPT | PCMag? That's just the tip of the iceberg.

MAKING THE CASE FOR DATA GOVERNANCE AT SMALLER ORGANIZATIONS

Many organizations, especially smaller ones without a Chief Data Officer, underestimate the tangible benefits of pragmatic data governance. In doing so, they also overestimate the cost. There is a perception in the market coming from the large consultancies that implementation requires massive ongoing investment and delivers middling ROI. On the CIO side, the story you hear over drinks goes like this: "*We hired a big-time consulting firm, their team showed up with spreadsheets in hand, and pretty soon we were paying for them to cross--index the rapidly multiplying spreadsheets… I'm still not sure we ever saw a tangible benefit to the bottom line*".

Granted, it used to take a lot of people to understand and mitigate the risks…but cost-effective software tools have made this much less expensive than in the past, where the only choice was an expensive enterprise data management tool costing millions of dollars in licensing fees. Happily, this is one area in life where price-competitive options have emerged! With pragmatic governance using basic tools, it is possible to realize major benefits without massive investment. The key is lightweight coordination, focusing on high-impact areas first. In making the case for change, the returns can be significant across these four areas:

1. **IMPROVED DATA QUALITY:** Implementing master data management and consistent data cleansing processes leads to the proactive resolution of inconsistencies. This approach ensures the data is accurate and timely, enabling business leaders to make informed decisions for planning and operational purposes. Our experience shows that clients can achieve up to a 30% reduction in data-related issues in production within the first year after adopting data governance practices.

2. **INCREASED AGILITY:** By creating detailed data maps that outline the key information flows across systems, organizations can speed up access to information for new projects and analytics efforts. This results in faster project development and can shorten the time needed for enhancements by days or weeks.

3 **REDUCED RISK:** Establishing clear policies for data access, encryption, data retention, and recovery significantly lowers the risks of data leaks, loss, or breaches. Adopting straightforward guidelines and conducting regular external scans and tests can enhance security measures.

4 **ENHANCED OPERATIONS:** Adopting common data standards reduces the need for data reconciliation between teams while providing reliable performance benchmarks. This leads to smoother operations and more accurate performance assessments.

CORE ELEMENTS OF A DATA GOVERNANCE MODEL

A robust data governance program is characterized by coordinated policies, procedures, technologies, and roles that enable organizations to control critical aspects of their data efficiently. At its core, data governance refers to the oversight and coordinated control of data availability, integrity, security, and compliance. This involves establishing unified standards and procedures for accessing, protecting, improving, and utilizing data to create business value. With clear data decision rights and accountability, organizations can reduce redundant efforts, improve reliability for reporting, and ensure alignment with regulations. In recent years, a proliferation of low-cost tools has been brought to market that allow smaller organizations to put in place highly rigorous data governance as would have previously only been seen at the largest banking institutions.

The five components that facilitate a structured data governance program are:

01 **DATA POLICIES:** Documented policies and associated standards form the backbone of governance programs. They provide guidelines spanning data security, lifecycle management, regulatory compliance, metadata requirements, and stewards' decision rights. By codifying rules for classifying, accessing, editing, and archiving information resources, policies enable consistency.

02 **DATA STEWARDSHIP:** Cross-functional data stewards take responsibility for administering policies within their domains as designated information proprietors. With leadership backing, stewards institute standards via procedures and control mechanisms tailored to their unit and data needs. This decentralized accountability ensures relevance while steward councils coordinate high-level governance issues.

03 **DATA TRACKING:** Meticulous metadata accompanies information resources to facilitate discovery and establish control settings as authorized by policies. Tagged elements like definitions, edits, user access permissions, and lineage allow stewards to manage data flows efficiently within and across systems.

04 **DATA QUALITY CONTROLS:** Standardized data entry protocols, automated validation checks, and data quality software help uphold accuracy and consistency per policy objectives. Master data management further aligns cross-system data. Uniform mechanisms for error correction and performance reporting uphold quality standards.

05 **COMPLIANCE PROCEDURES:** Explicit reviews aligned to reporting needs ensure data adheres to regulatory and policy mandates through its full lifecycle. Privacy impact assessments determine appropriate use and protection levels. Checklists guide IT transformations and new analytics projects to maintain compliance by design.

With these robust elements cohesively implemented, data governance delivers the oversight needed to fuel an organization through reliable, protected information sharing.

TOOLS AND ACCELERATORS

Each element is critical to effective data management—from data policy to stewardship and consumption—necessitates a robust infrastructure for construction, management, and operation. While the market is flooded with software packages catering to these needs, many come with a steep learning curve and a hefty price tag, making them less accessible for small and medium-sized businesses (SMBs). However, there are cost-effective, user-friendly options available that provide significant capabilities without breaking the bank. Here are a few examples of tools that we have used that offer a great return on a small investment:

TOOL	WHY WE LOVE IT...
Atlan Data Governance	This lightweight governance platform is designed specifically for SMBs. It provides an integrated portal for managing policies, standards, metadata, data maps, issue tracking, and more. → We've found that the intuitive interface allows non-technical users to collaborate easily.
Collibra	Collibra offers an enterprise data intelligence platform with complete data governance capabilities via flexible role-based interfaces. In addition to stewardship, profiling, and cataloging, it focuses heavily on data quality via validation, enrichment, and remediation. → In our experience, Calibra is a solid choice for organizations with a clear mandate; its modularity offers multiple paths for phased deployment and rollout.
ERWIN	ERWIN is a well-established name in the data management space; initially providing data modeling tools and capabilities, the company has expanded their suite of products to offer a much broader set of capabilities for data governance. Their data intelligence suite for data governance automates policy and metadata management while providing pre-built industry practice content for common regulatory scenarios like GDPR and CCPA compliance. → We've found that ERWIN's low-code environment simplifies setup and adoption.
Informatica Axon	Informatica, known initially for its ETL platform, provides an end-to-end data governance solution, including policy and rules management, data catalogs mapped to glossaries, data lineage visualizations, and pre-configured regulatory rule sets. Its reference architectures accelerate implementation. → We have successfully deployed Informatica tools in various environments, large and small, and the platform adapts well to both.

Still think data governance needs to be expensive to be effective? The following are two examples from our experience:

CASE STUDY – FORTUNE 100

SITUATION

A large US mortgage industry player had grown rapidly both through organic expansion and acquisition, leading to significant diversity in customer platforms and data environments.

THE CHALLENGE

Individual business areas controlled their infrastructure, leading to significant differences in definitions for concepts such as 'customer,' 'product,' and 'sale.' This created significant challenges in running an integrated business-- increased costs through inefficient operations, confusion over customer ownership, and compliance risks from inconsistencies in meeting local privacy regulations.

Specific challenges included:

- Customer confusion and strained staff from conflicting product data between channels.
- Non-standard data, making central analytics and reporting unreliable.
- Widening gaps to expanding data protection laws across jurisdictions.
- Resolving these issues became imperative for operational integrity, risk mitigation, and informed executive planning.

THE SOLUTION

To address these concerns, a small team of CC Pace staff engaged with the organization's business and technology leaders to drive clarity and consistency at the enterprise level. The team introduced a structured framework for organizing around the data, declared ownership of data by clearly defined subject areas, and implemented policies and procedures designed to maximize the quality and value of the data:

- Federated data organization with clearly defined stewardship.
- Policies and procedures for acquiring, transforming, delivering, and using data across the organization.
- Consolidated master product data definitions to drive consistency.
- Universal taxonomy and metadata requirements.
- Security protocols and access controls to further control access and facilitate audits.
- Automated validations and dashboard tracking for quality visibility.

THE RESULTS

The transition was championed by executive management, ensuring buy-in and participation across all lines of business. With foundational data governance established, the organization could pursue transformation initiatives built on an integrated bedrock of accurate, protected data. This transition ultimately led to an overall improvement in business performance due to reliance on **quality** data, smoother acquisitions, trusted analytics for long-term decisions, and proactive compliance readiness as regulations evolve across a global footprint.

INVESTMENT

The outcome was accomplished with a team of 2.5 resources over 15 months. Competitor bids were 3 to 4 times this size.

CASE STUDY – SMB (MEDIUM SIZED BUSINESS)

SITUATION

A mid-size law firm specializing in helping telecom companies acquire FCC licensing to operate in the US manages thousands of license types across various wireless applications, and their clients depend on firms to navigate requirements.

THE CHALLENGE

Access to FCC license data sources through the FCC's online data platform is limited to specific search criteria; occasional outages impact the ability to access data when needed, e.g., as part of an imminent litigation effort. Further, with licenses often changing hands, answering basic client questions without exhaustive research across multiple FCC data sets was difficult. This increased response times and costs.

THE SOLUTION

CC Pace implemented a lightweight data management approach to help centralize, structure, and track FCC license data, including:

- Consolidated key license data sets into a basic database repository with clear data definitions.
- Mapped relationships across data sets to quickly link applicants, owners, locations, and license attributes.
- Built a simple lookup application to quickly find licenses by geography, owner, status, etc.
- Established daily data feed from FCC systems to keep the repository current.
- Implemented basic data validation checks for critical fields.

THE RESULTS

With more trusted data at their fingertips, our client significantly reduced research time per license inquiry. They could easily clarify license ownership changes, research market availability, and advise clients with confidence backed by accessible, integrated data. The solution delivered time and cost savings without a major investment, demonstrating the power of pragmatic approaches. Our client continues expanding their data capabilities to widen their competitive advantage.

INVESTMENT

This outcome was accomplished in less than 100 hours.

TAKE ACTION! MAKE THE CASE FOR CHANGE IN YOUR ORGANIZATION!

It is easier than ever to make the case for improvements in your organization's data governance capabilities. In this era of AI-driven business, data governance can't be an afterthought – it must become a strategic priority at any organization using AI. With advanced analytics and technologies poised to drive the next wave of innovation, establishing governance now saves substantial technical debt down the road that can limit competitiveness. Trusting data and leveraging it rapidly across multiple applications remains imperative to unlocking productivity and creativity. The good news is pragmatic governance is now within reach and is affordable for smaller organizations. With readily available lightweight tools, the lift required to realize benefits has never been lower. With some upfront coordination- convening teams, mapping major systems, establishing light policies – a clear payoff can be achieved without overhauling infrastructure. The returns from trusted information sharing across marketing, operations, and finance quickly compounds.

A great way to start is through a basic assessment evaluating the risks in your organization's data ecosystem and infrastructure including recent failures and exposure as well as opportunities for improvement. You will likely learn that the business intends to build further capabilities and insights, including AI-based solutions… upon a shaky foundation. It is equally possible that you can greatly improve upon this foundation in a cost-effective manner. Often, an independent advisor -- such as CC Pace-- can act as a catalyst for pragmatic change. Take it on alone, or ask for help; in either case, big benefits await! Reach out to us with any questions or to get a free estimate.

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