![Alation]

ACTIVE DATA GOVERNANCE METHODOLOGY

Using a people-first approach to avoid failed governance programs

Why Data Governance is on Everybody's Mind

Data governance is a hot topic. Its rising popularity is fueled by:

- Exploding **data growth**,
- Headlines on major **data breaches**,
- **Expanding privacy regulations**,
- **Consumer & organizational concerns**,
- New types of extrinsic **security threats**, and an overall trend of
- **Market growth**

Data growth: At enterprises everywhere, explosive growth in data volume continues unabated. IDC predicts that the Global Datasphere – the sum of all data created, captured, or replicated at core, edge, and endpoint locations – will expand from 33 ZB in 2018 to 175 ZB by 2025. That's more than a five-fold increase in just seven years.

Furthermore, starting in 2019, more data will be stored in the enterprise core than in all the world's existing endpoints.[1]

Data breaches: Indeed, the unauthorized use of personal data is a growing concern. Frequent news headlines related to major data breaches and the illegitimate use of personal data have fueled increased public awareness of the importance of data governance.

In 2019, a record number of penalties were imposed on well-known organizations. Among these were large airline and hotelier Marriott, who faced record-breaking GDPR fines of US $229M and US $123M, respectively. Meanwhile, Equifax consented to pay an eye-watering US $575M in a settlement with the FTC, CFPB, and all 50 US states and territories.[2] The number of reported data breaches increased 33% in 2019, resulting in more than 7.9 billion personal records exposed.[3]

[1] IDC. The Digitization of the World from Edge to Core. 2 November 2018
[2] JDSUPRA. The Scariest Data Privacy Breaches of 2019. 31 October 2019
[3] The Hill. Navigating 2020's threat landscape: Many risks, but also optimism. 3 January 2020

Each year, these records are broken, and by increasingly massive margins. In July of 2021, the 2nd largest retailer was hit with a whopping GDPR fine of $886.6M for allegedly breaking EU data protection laws.[4]

Expanding privacy regulations: Organizations face increasing demands to comply with a growing list of evolving legislative and regulatory requirements, like GDPR and CCPA. To meet these demands, enterprises seek to better manage risk, mitigate liability, and ensure best practice. Enterprises are taking a hard look at the processes in place to address these critical compliance policies and procedures.

Consumer & organizational concerns: Enterprises are prioritizing data governance to respond to the pressures associated with data growth, **extrinsic security threats**, and regulations. A recent Gartner survey highlights this shift; senior audit professionals revealed that data governance has surpassed cybersecurity preparedness as the top concern of Chief Audit Executives (CAEs). Nearly 80% of executives surveyed concur that companies will lose competitive advantage if they do not effectively utilize data, and 49% acknowledge that data can be used to decrease expenses and create new avenues for innovation.[5] Protecting personal data is essential to achieving these goals.

Market growth: Based on a MarketsandMarkets 2019 comprehensive survey, the worldwide data governance market is projected to grow from $1.8B in 2019 to $4.8B by 2024, representing a CAGR of 21.5% during this 5-year period.[6] Compliance management is expected to be the fastest growing segment in the market.

What is Data Governance?

There are two definitions of data governance that notably differ in their focus:

> **1** According to DAMA International, "Data governance is the exercise of authority and control (planning, monitoring, and enforcement) over the management of data assets."[6] This definition focuses on **authority and control** over data assets.

[4] Gartner. Top Risks for Audit Leaders. 8 November 2019
[5] MarketsandMarkets. Data Governance Market. December 2019.
[6] https://www.dataversity.net/what-is-data-governance

2 According to Bob Seiner, "Data governance is the formalization of behavior around the definition, production, and usage of data to manage risk and improve quality and usability of selected data."[7] This definition focuses on **formalizing behavior** and holding people accountable.

The two characterizations that best epitomize these predominant approaches are "traditional" and "modern."

The **traditional**, centralized, data-first approach to data governance represents a command control, defensive strategy focused on enterprise risk mitigation at the expense of the true needs of those who work with data. The Data Governance Office develops policies in a silo and promulgates them to the organization. This outdated approach adds to the burden of obligations on data users throughout the enterprise who have little idea of how to meet the new and unexpected responsibilities.

The **modern**, active, people-first approach to data governance empowers people with a balance of access and guidance. This approach guides the people who work with data on compliance best practices. Users are empowered with access, but nonetheless expected to contribute to the repository of knowledge about the data and follow guidelines, rather than rigid, prescriptive procedures. Alation is the leading enabler of the modern, people-first approach to data governance, which actively engages the community and drives broader adoption.

Traditional Approach to Data Governance and its Shortcomings

Data-first vs. people-first: Traditional data governance regards data first, rather than people's time and effort. It emphasizes governing data in contrast to governing the actions of people. Traditional governance represents a legacy approach, embodying restrictive, iron-fisted policies that alienate data workers, especially when accompanied by unagile procedures that require these workers to perform extra tasks with no clearly discernible value added. This extra work can overwhelm an organization, eventually undermining

[7] Robert S. Seiner. Non-Invasive Data Governance: The Path of Least Resistance and Greatest Success

the effectiveness of the overall data governance program. This siloed approach neglects both the true needs of LOBs and data workers, both of which remain disconnected from the governance process since governance is not embedded in their day-to-day activities

An effective data governance program must start with, and center around, the people. "You can pull together a policy which encompasses all the right things to do at the right time," reflects Amy Keelty, Information Strategy & Governance Director, American Family Insurance. "But if you aren't able to share that information, and get buy-in and execution from everyone who is accountable, then you are not taking the right approach. It was important that our people and the right individuals were involved and that's the gap we had."

Lack of focus on business impact: Traditional data governance is defensive. As such, it emphasizes enterprise risk mitigation and compliance at the expense of delivering quality, curated data to the business. And too often, risk management is focused on IT concerns rather than strategic business risks. When data policies are developed in silos, those policies neglect the potential business impact. Governance policies and guidelines are not communicated effectively to the line-of-business, resulting in individuals' ignorance of policies relevant to their work.

Prolonged, expensive, and document-centric: A customer of Alation summarized the challenge their company faced after implementing a traditional data governance solution: They "spent millions of dollars on a governance program that did not work. [We] needed a governance framework for self-service analytics."

This statement highlights two shortcomings of a traditional data governance program: expensive and prolonged. The traditional approach is best characterized as a long "journey" that enterprises are reluctant to take. Thus, data governance is often viewed as a necessary evil for enterprises endeavoring to protect private data and comply with regulations.

Traditional governance requires cumbersome, expensive software for ensuring governance policy documentation but not actual policy compliance. This is exemplified by a quote from an Alation customer, who said, "I wanted data governance but all I got was a business glossary." Such a documentation-centric approach may have been adequate for passing audits 5 years ago. But today it falls short. Today, regulators want proof that data is being used in a compliant fashion.

80% of data governance Initiatives fail: Gartner predicted, "Through 2022, only 20% of organizations investing in information governance will succeed in scaling governance for digital business." This means the analyst firm anticipates that 80% of companies investing in data governance will fail to leverage data governance for digitization very soon. It correlates failure of data governance programs with organizational inability to align with digital business outcomes.

An Active, People-First Approach to Data Governance

Alation's people-first approach to data governance focuses on building a community of business experts committed to using data as a competitive asset; these leaders are focused on improving their organization's effectiveness by optimizing operations and business outcomes by using data intelligently.

Data Governance: The Alation Approach

Formalizes what already exists – The path to data governance has been misrepresented as a long, expensive journey. In reality, most data consumers at large organizations are already governing data informally. Using Alation,

leaders can formalize these data governance activities. With the data catalog, they can first inventory what all are presently doing, then leveraging this knowledge to improve, guide, and formalize what governance processes already exist.

> *"One of Cisco's primary goals was to enable the democratization of data while simultaneously ensuring our data was properly governed. To succeed, we needed a user-friendly platform that provided business units with the ability to utilize data and drive their business forward.*
>
> *With Alation we consistently deliver high quality governed data with context in a single platform, providing our business users with visibility into what data exists and where it resides."*
>
> ABRA LE
> Director of Data Governance, Cisco

Starts with people – Formalizing existing governance practices starts with people. Most of them undoubtedly already have some level of responsibility for the enterprise's data. Alation enables organizations to intelligently analyze who does what with the data, and then use these insights to formulate an operating model of roles and responsibilities that align with peoples' existing relationships with the data.

> *"Data is at the core of running our business and Alation is at the center of our data ecosystem. By empowering our teams with knowledge about our data, we are lowering the barrier for generating insights, and can provide a better customer experience.*
>
> *We chose Alation because it allows for controlled visibility and access into trusted data, and a next-gen approach to data management at the point of consumption so that the right data is used by the right people."*
>
> SEBASTIAN LaROSA
> Director of Data Platforms, Vice President, Fifth Third Bank

Actively guides people to govern data – Alation's approach focuses on guiding the people as the means to governing the data. This contrasts with legacy approaches that focus on simply documenting data and policies. Guiding people's behavior is accomplished by embedding governance policies, standards, and terms in data consumers' normal activities, workflows, and tools. Users have immediate access to these as a guide while searching, using data, and contributing to the corpus of knowledge.

> *"[Our goal is a] landscape of data producers and consumers with just enough rules to ensure seamless cooperation without severely impeding autonomy."*
>
> MARKUS SCHMIDBURGER
> Head of Data Engineering, Scout24

Collaborative, not bureaucratic – Alation's governance approach empowers employees to participate in a community where they are rewarded for sharing their knowledge and input. Experts can record their expertise in wiki-like articles around a specific asset, or offer guidance in saved conversations. In this way, the data catalog delivers value to the employee population at large as opposed to concentrating the power of stewards or IT – and granting outsized control to the few over the flow of knowledge to the many.

> *"Alation combines governance and data democratization capabilities into one unified solution and can add value for customers as part of their Snowflake capabilities. Both technologies are focused on helping enterprises unlock the value of their data and build thriving data cultures."*
>
> COLLEEN KAPASE
> SVP of Worldwide Partner and Alliances, Snowflake

Iterative, not waterfall – Alation's approach to governance employs an iterative process of continuous management and improvement of data and data-related assets. Community participants are central to this process. They consume and contribute new knowledge while stewards guide their analysis based on standards and policies.

> *"Our corporate glossary approval process for changing a term went from 2 to 3 weeks, down to just 1 hour."*
>
> SUSANNAH BARNES
> Information Standards Governance & Quality Specialist, American Family Insurance

Active Data Governance Methodology

Modern data governance leaders understand the importance of high quality data. They are searching for the role that governance should play in delivering it, and seeking help on how to implement that approach to data governance. That may seem strange given the volume of available material from 'independent experts.' But the truth is, legacy approaches are complex and resource intensive. Such approaches feel imposed on the business rather

than for the business. In a word, the experts are failing and smart leaders are looking for a better answer.

Alation offers an active approach to data governance with a focus on building a community of business experts who are committed to improving their organization's data literacy. Continual improvement is core to this approach, which also supports new, emerging disciplines like DataOps and DevOps. By adopting the processes and mindset of continual improvement, the chores of data governance can be automated. Data stewards have day jobs! By automating governance, enterprises can relieve folks of the pressure of stewardship.

Key Characteristics

The differentiating characteristics of Alation's Governance Methodology are:

- **Pragmatic, not theoretical** — What's the starting point for "what to govern"? The reports used monthly, quarterly, and annually to run the business. By definition, those reports contain the most important business metrics and are supplied from the most important data sources. The most impactful governance activities will maintain and improve the completeness, quality, and accuracy of these data sources for the benefit of the entire organization.

- **Business-centric** — Alation's governance approach begins with business content and requires business ownership. Executive buy-in will sustain a high level of quality that delivers value to the entire employee population. This is beyond participation in a program that is led by IT, but ownership of the process itself as supported by IT.

- **Continuous Improvement** — Data is always changing and degrades at a predictable rate. Given this truth, data governance is not a "one and done" process. It includes a feedback loop that prioritizes people's efforts based on targets and measurements to maintain high-quality metadata. This people-centric process ensures data is always improving and ready for analysis and modeling. In this process of continual improvement, data can be continuously refined, so it is always ready for analysis and modeling.

- **Intelligence** – Machine learning can automate the most tedious processes around data governance, scaling governance across the enterprise. Machine learning can support more autonomous stewardship and eliminate the drudgery of data stewardship, including the discovery of data steward candidates. Stewards have busy day jobs, so eliminating much of the work of data stewardship is transformative.

- **Incremental, not 'big-bang', implementation** – Alation's governance approach focuses on repeating a successful pattern of implementation across business areas. This enables the rapid delivery of value to the business, and for decisions to be made about incremental investment based on proven success.

- **Community driven, not committee controlled** – Alation's governance approach empowers employees to participate in a community where they are welcomed and rewarded for collaborating, and sharing their knowledge and ideas.

- **Guided, not gated, participation** – Alation's governance approach is rooted in the belief that people want to do a good job and will follow guidelines for participating and contributing when trained. It is therefore in the greatest interest of the organization to not use the role of steward to block participation or meter the flow of content, but to instead act as mentor and coach, guiding and helping people do things correctly.

- **Employee value, not steward & IT centric value** – Alation's governance approach focuses on delivering value to all employees, not creating a mechanism to drive value to stewards or IT alone by enabling them to have complete control over the flow of knowledge.

- **Data usage, not documentation** – Alation's governance approach goes far beyond simply documenting and creating glossaries. It integrates the governance policies, standards, and terms, with access to data, queries, and reporting. This embeds governance at the point of access, making it an active and natural part of the work activities for analysts and users.

Alation's approach is also unique because it defines data governance as three distinct elements that can be implemented independently or together. This provides a level of clarity about who should implement what and how, which allows leaders to make clear investment decisions and understand what results can be expected.

Active Governance Process

Alation's approach to governance delivers an iterative process of continuous management and improvement. Community participants are central to this process, as they both consume and layer in new knowledge, while stewards guide them based on standards and policies.
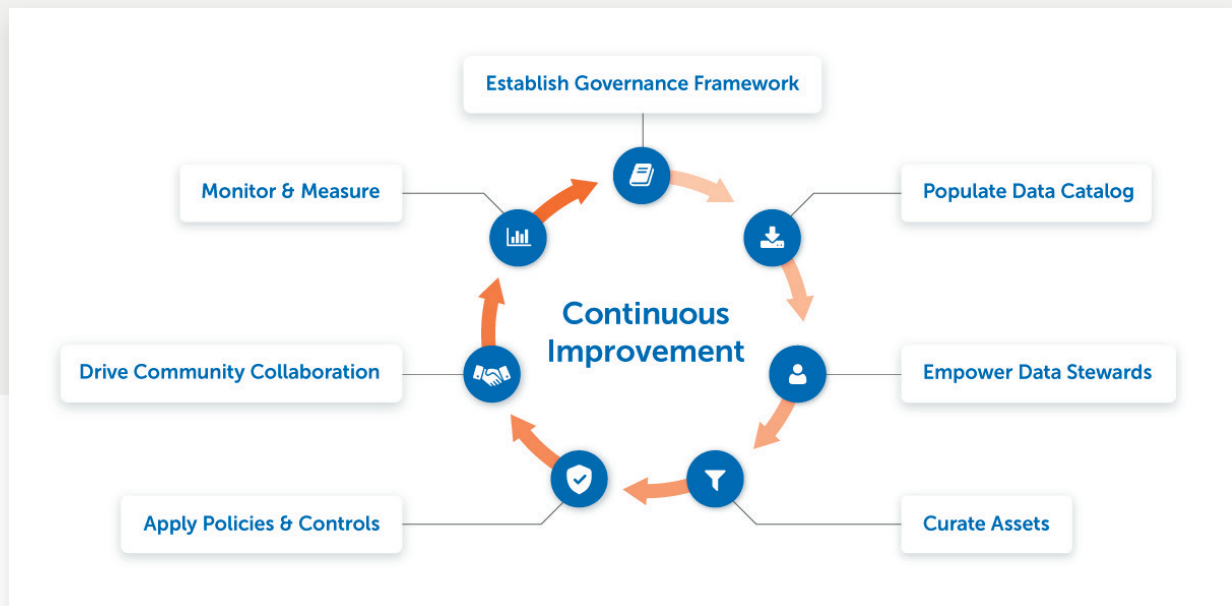
1. **Establish Governance Framework** - The data governance process requires that some things be decided in advance; namely, what will be governed, how it will be governed, and how success or failure will be measured. These represent target commitments that are expressed as policies and standards. Policies and standards should define completeness, quality, accuracy, timeliness, usage, access and classifications for both metadata and data.

   Governance programs often suffer from a reliance on dusty and inaccessible policy documents, which are supposed to somehow factor into everyday business activities. Active governance integrates policies into workflow, keeping them top of mind. This is why strategic policies should be linked to actionable implementation data control rules that are driven into a variety of technology tools and platforms.

2. **Populate Data Catalog** - Governance requires knowledge and content. Historically, this knowledge has been gathered by assembling experts (stewards and SMEs) to identify key business assets on a one-time basis. The complexity and ongoing transformation of a modern enterprise makes this approach unsustainable. Alation's approach has the organization identify key assets so that their metadata can be ingested and analyzed. This process translates technical labels into human ones, giving understandable names to abbreviated and critically named data assets. As a goal, Business Stewards should be able to consistently and easily measure the gap between the governance standards and existing performance. This gap perpetuates an active cycle of assignment and continuous curation.

3. **Empower Business Stewards** - As implementation of governance begins for each business area, it's critical to recognize and identify business stewards. Generally, stewards sit inside the business area and play a critical role in driving awareness, onboarding, moderating and guiding participation. They are accountable for ensuring the targets in the policies and standards are maintained. Historically, governance teams have tasked stewards with primary responsibility for this enforcement work – they are the so-called policy enforcement officials of data.

However, in the modern era, there's just too much data and far too much change for stewards to keep up. To address this problem, potential stewards are discovered based on their contributions and use of data. The goal is to build a community. Stewards and governance teams must foster and build a community of willing participants, who are recognized and rewarded for making data governance a key piece of the organization's culture.

This step is about building an ecosystem of participants and stakeholders who will adopt responsibility for contributing to and maintaining the catalog. To recruit and build a strong community, leaders must clearly identify stakeholders, and support them with **recognition** and **rewards**.

Recognition is based on usage and participation analysis. Teams and individuals who contribute should be celebrated and recognized. More formal mechanisms, such as certification levels, badging, and rewards, can also recognize people for their work and contributions.

There are two dimensions to rewards. The first is the personal satisfaction that each person gets from having a trustworthy source of knowledge. And when subject matter experts can share their expertise on a platform, many others benefit from that wisdom. This not only generates gratitude and recognition for that expert — it saves them time spent answering the same questions repeatedly. Experts are tough to source and keep. By automating the tedious, repetitive tasks of these experts, a data catalog grants them the time to pursue more meaningful, rewarding work.

The second element of rewards is more tangible and can be provided in the form of bonuses (monetary, gifts, parties, time off, etc). Rewards are associated with participation and maintaining quality standards.

4. **Curate Assets** - Curation is the process of populating and refining the attributes of an asset to provide users with greater trust through insight and knowledge. It is one objective of the governance process to maintain the required attributes for each asset as stipulated in the policies and standards. The Business Steward is accountable for maintaining the standards but is expected to do so through delegated responsibility to top users and other volunteers. The keys are training, recognition, and ensuring that participants realize that they have an ownership stake in the quality of the content.

5. **Apply Policies and Controls** - Once enterprise data policies and standards are established the next step is to implement data controls. This involves the creation of rules that are applied within a data source for the purpose of adjusting entitlements and monitoring. The rules are specific instantiations of the standards for each data source environment and are bi-directionally synced with the catalog. They could be created in the data source or Alation and then related to the enterprise policies and standards.

6. **Drive Community Collaboration** - This step is the beginning of a self-perpetuating cycle of engagement and adoption. The community is the key to driving a data culture that scales while following quality norms and enforcing behaviors and policies. After new community members are on boarded and trained, they participate by sharing their knowledge and curating assets based on standards. This increases the breadth, depth and quality of information, which in turn attracts more new community members.

New community members should learn the role of participants, usage policies and guidelines; they should be trained on how to contribute and collaborate, and learn key details about relevant

governance assets, standards, and policies. Members should also learn how they are recognized for their knowledge and contributions, while also benefiting from the contributions of others.

7. **Monitor & Measure Curation** - Business Stewards have a responsibility to mentor and guide the community to build very high quality content. To do so effectively, they should have monitoring and measurement tools to understand how the governance process is working or not. Business Stewards particularly should be able to measure curation progress against the policies and standards. These capabilities allow Business Steward to zero in on information that is missing and cross-check updates.

Workflow can be deployed throughout the process. The point is to highlight its use for change management. This step involves the Business Stewards requesting a change, receiving a change request, or an escalation. Here, business stewards can create specific requests for users, users can request things from the Business Steward, and groups can have moderated discussions to resolve conflicts. It's important to establish a flexible communication mechanism that allows for accountability to be tracked and enforced.

Conclusion

To succeed at data governance, data governance professionals and stewards need a robust, repeatable process to follow. Our goal for this white paper has been to define that process for you and offer tips to ensure your success.

Data governance has evolved and changed dramatically. To secure buy-in, it's important that people understand you're adopting a fresh approach. Emphasize that active data governance is different. This approach is focused on empowering people — not punishing them. With time, training, and continued success, your teams will see the value of active governance, and be excited to participate in its ongoing success.

In the next white paper, "Using Alation to Accelerate Your Active Data Governance", we share how Alation helps accelerate the Active Data Governance Methodology with its products and services.