

DATA GOVERNANCE OVERVIEW



Prepared by OMES Information Services
Data Governance Program Office



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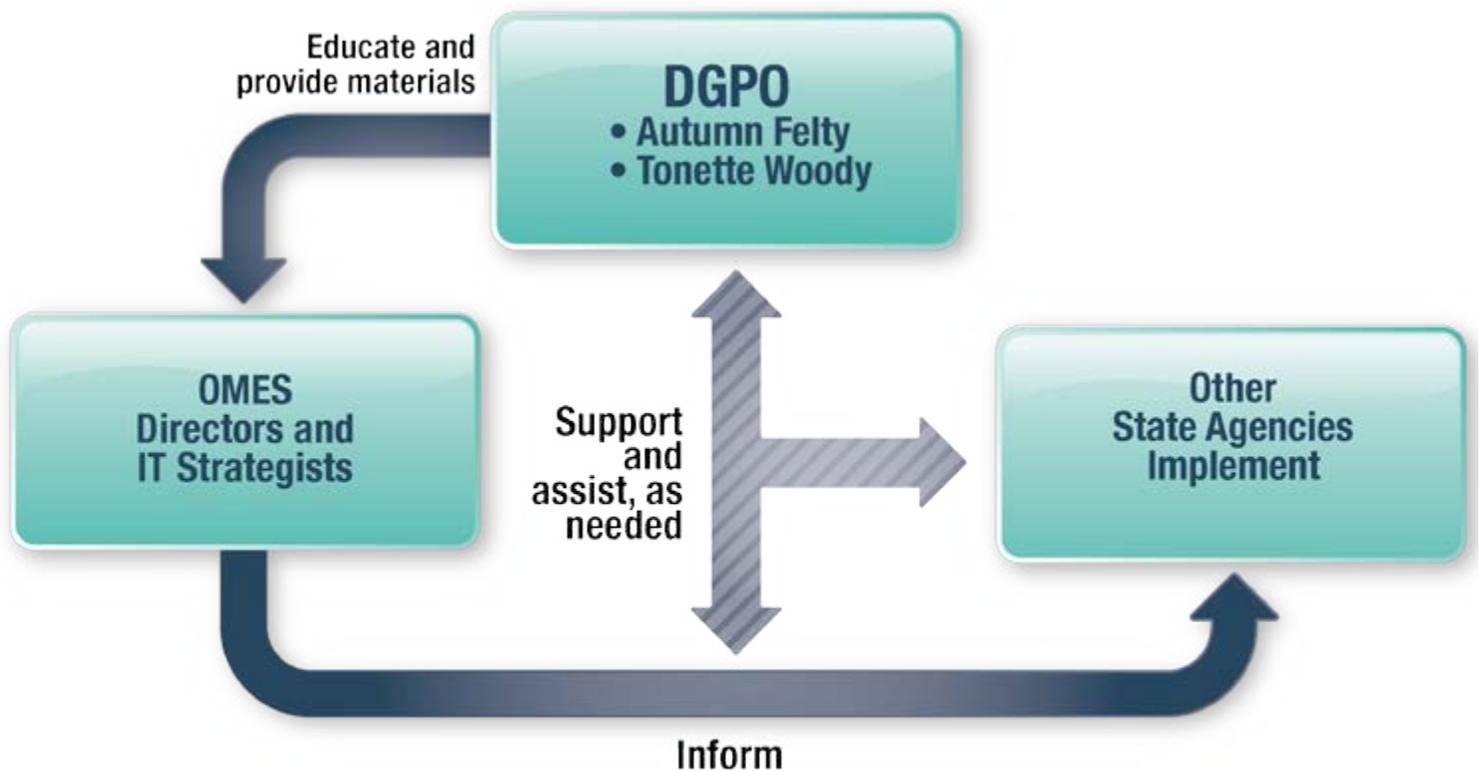
OMES Data Governance Program Office

The Data Governance Program Office is a service-oriented office that helps State of Oklahoma agencies begin data governance programs and provides process monitoring, document auditing and ongoing support once the programs are established.

Mission

Support Oklahoma's data governance efforts by providing education, materials, resources and services that ensure the state's data assets are the highest quality, managed appropriately and accessed securely for decision-making and policymaking.

Workflow



What is Data Governance?

A Process, Not a Project



Data governance is an organizational process and a structure. It establishes responsibility for data, organizing program area staff to collaboratively and continuously improve data quality through the systematic creation and enforcement of policies, roles, responsibilities and procedures.

- Data governance is used to define the decision-making processes around data.
- Data governance is a strategic, long-term process.
- Data governance usually appears in an organization when it reaches a certain maturity level.

It adds rigor and discipline to the process of managing, using, improving and protecting organizational information. Effective data governance can enhance the quality, availability and integrity of data by fostering cross-organizational collaboration and structured policymaking.

Why Data Governance?

Tighter Informational Control

Data governance builds opportunities and reduces risks of data breaches, privacy violation, distributing bad data.

Information quality

Having agencywide data standards, definitions and coordinated effort will improve data quality.

Ability to integrate

Well-defined data management processes allow an organization to be proactive and integrate with organizational changes or developments at a reduced cost and with limited burden.

Performance management and business intelligence

Defining clear ownership of data, controlling data quality and implementing data management will reduce the costs and complexity of performance management and business intelligence.

Establish new rules and processes

Creating and implementing standard, formalized rules and processes is key to ensuring data are trusted, secure and ultimately fit for business usage.

Align or modify the existing rules and processes

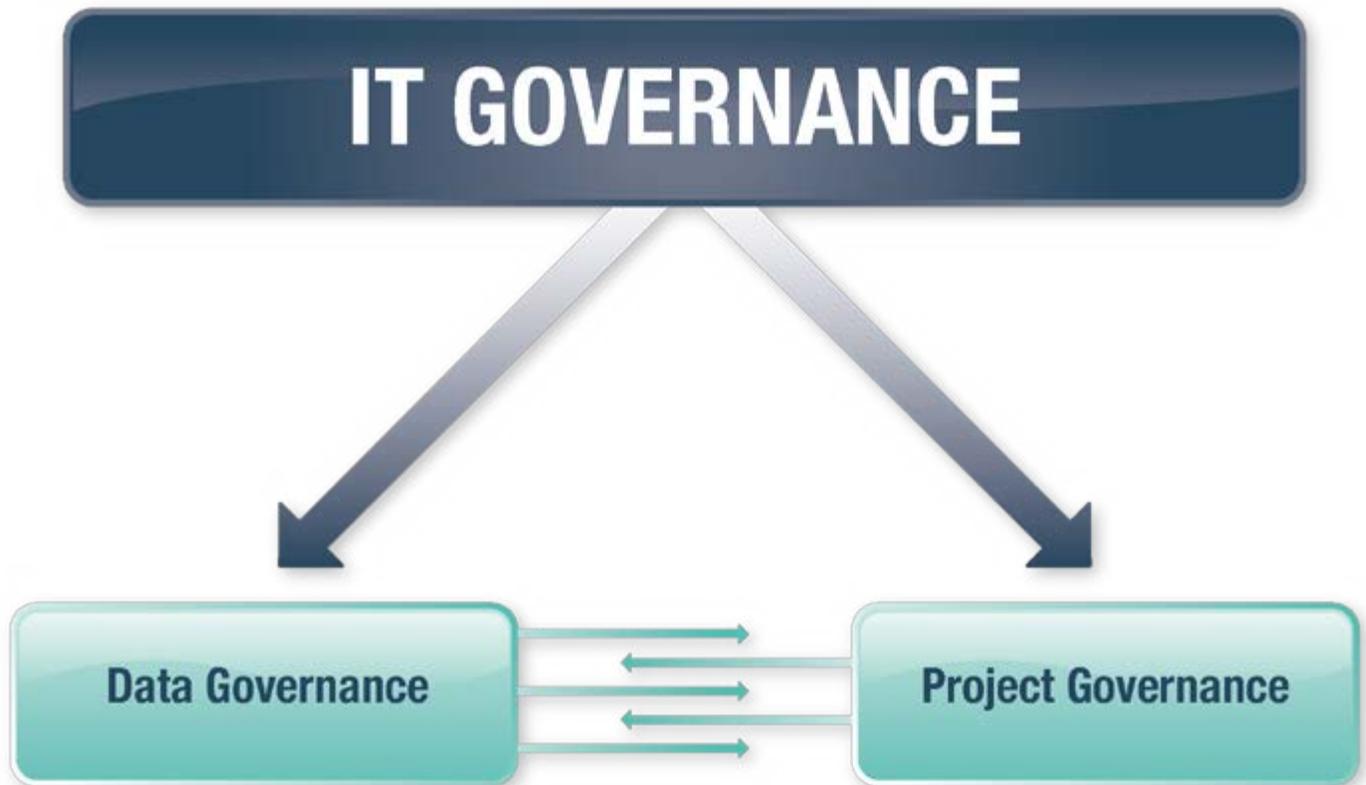
Assessing existing rules and processes to ensure they are accomplishing the purpose intended and modifying them if needed.

Richer data environment and regulatory compliance

Overall, data governance leads to a richer data environment and ensures regulatory compliance.



How Does Data Governance Fit Into IT Governance?



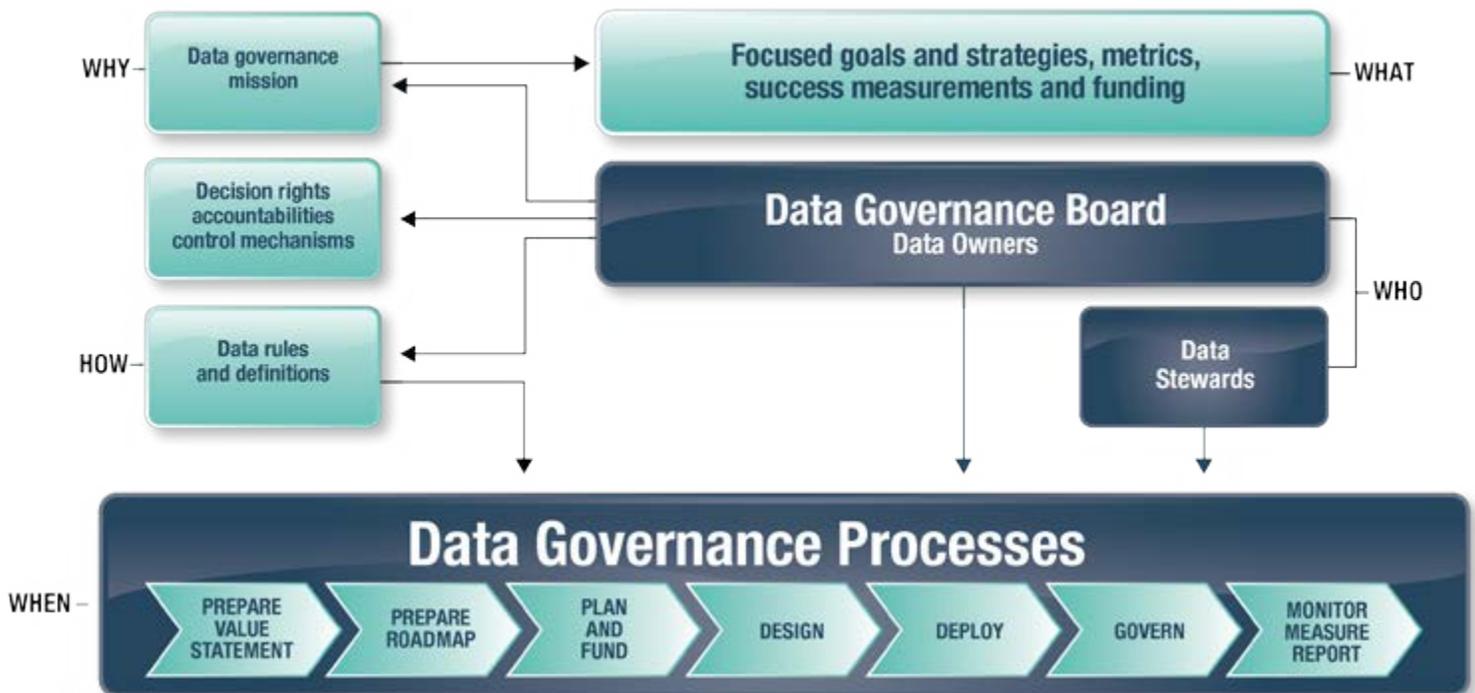
Data governance complements project governance. Both exist under the overarching structure of IT governance.

- Project governance focuses on defining a portfolio of investments, setting performance objectives, and evaluating and managing risk for IT projects.
- Data governance focuses on creating a structure enabling an organization to align data management efforts to business objectives, to support regulatory compliance and to manage risks associated with data.
- IT governance is the overarching structure that focuses on IT infrastructure, including managing resources and risks, to ensure IT efforts and solutions align with the organization's mission and business goals.

To borrow an analogy commonly used by the data management community: IT governance focuses on the pipelines in the organization's IT infrastructure, data governance and project and portfolio governance focus on the water that flows through those pipelines.

Framework

- **WHY** your specific program should exist.
- **WHAT** it will be accomplishing.
- **WHO** will be involved in your efforts, along with their specific accountabilities.
- **HOW** data governance processes will be achieved.
- **WHEN** specific data governance processes will be performed.



Data governance helps to define overarching rules by coordinating, weighing and balancing the needs of all stakeholders through identifying:

- A decision-making process.
- Roles and responsibilities of stakeholders.
- Rules and processes consistent across organization.

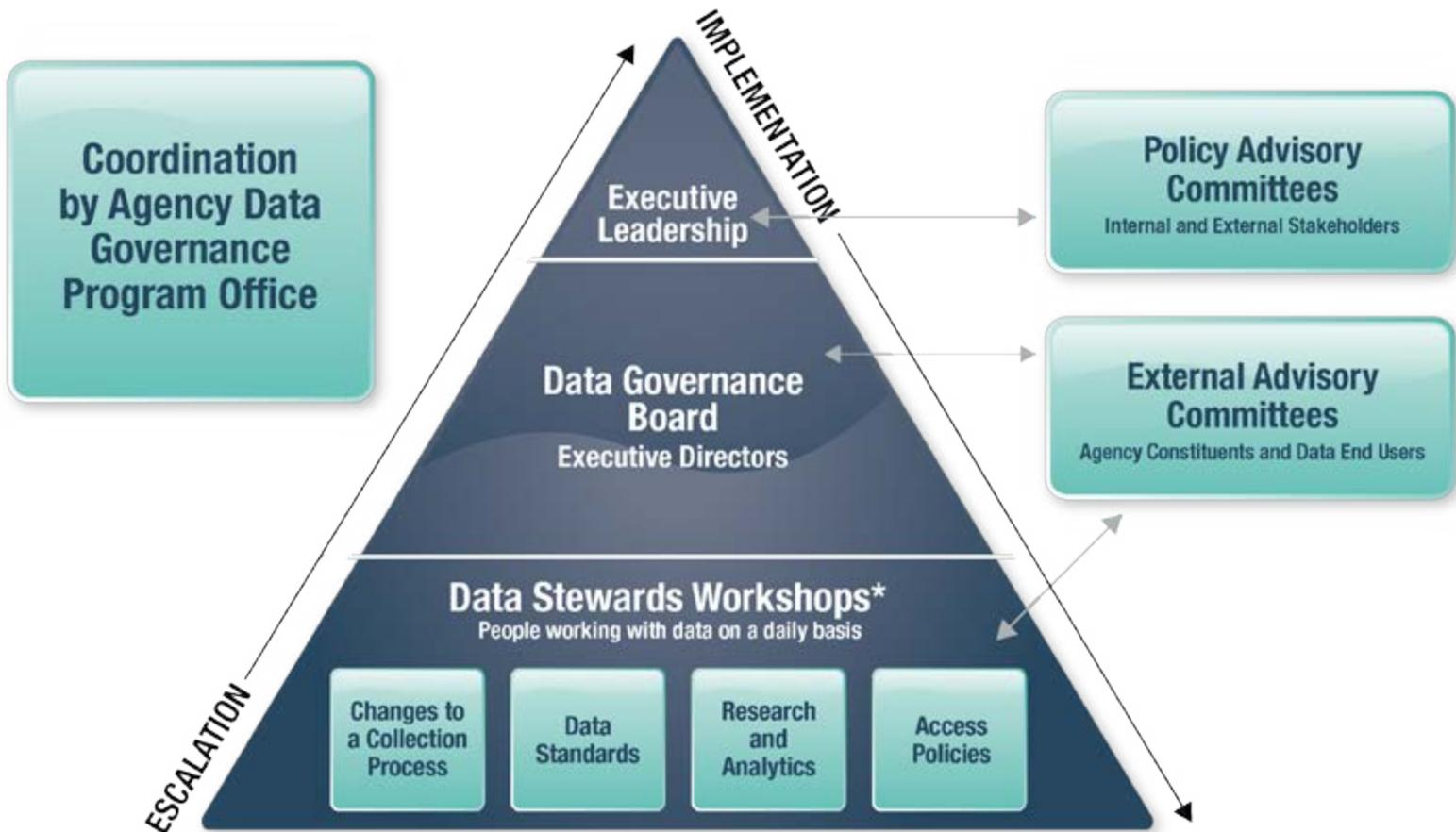
A data governance framework allows organizations to “decide how to decide.” It outlines how to make decisions about managing data, realizing value from it, minimizing cost and complexity, managing risk and ensuring compliance.

In short, data governance sets the rules of engagement for data management activities, and the framework is the workflow for those rules of engagement.

From the execution side, a data governance framework touches every part of the data management process down to the individual technologies, databases and data models. The framework also affects the processes people use to create and retain data and how these rules are replicated within applications to help make smarter decisions faster.

The best part about a data governance framework is organizations never start from scratch. There are typically pockets of data governance underway, and new efforts can tap into those to find leaders, supporters and advocates.

Structure

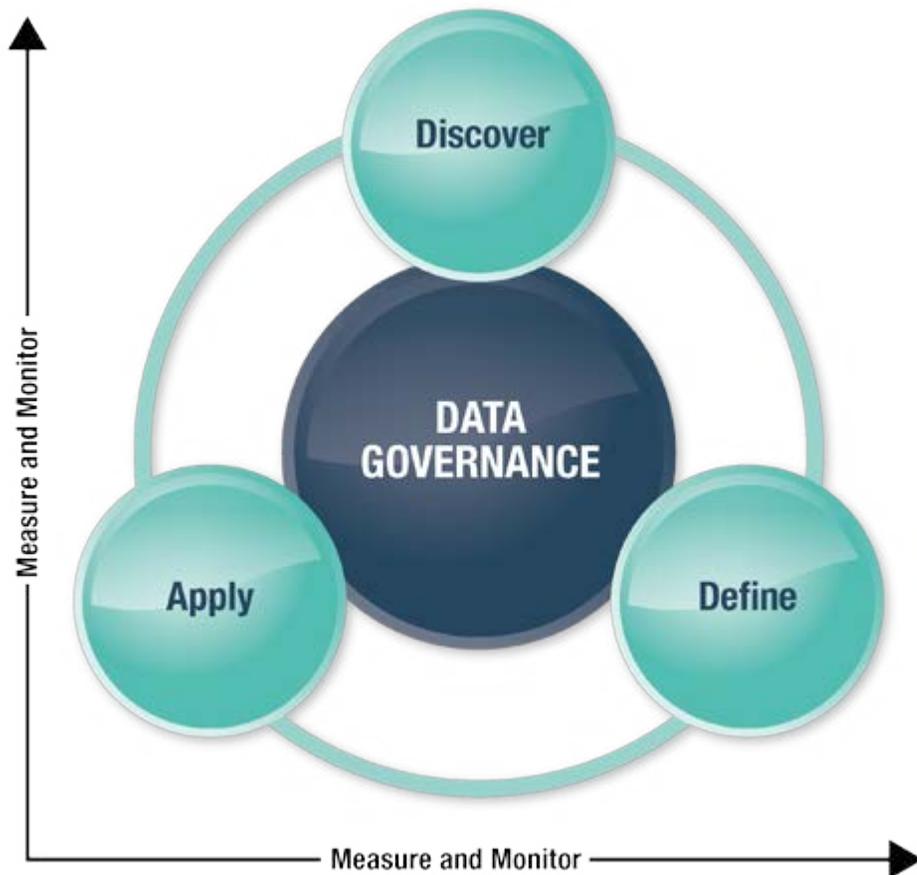


*Examples of workgroups. Some may be engaged long term and others short term. They may include agency and non-agency representatives.

This is a basic data governance committee structure. Escalation flows up the pyramid with the executive leadership having decision-making authority, and implementation flows down the pyramid with the data stewards being the subject matter experts and best suited to implement processes and changes to data.

This structure allows organizations to clearly identify decision-making authority at all levels.

Process Stages



Discover

- Current state of data and processes.

Define

- Data definitions and business context.
 - Policies
 - Rules
 - Standards
 - Processes
 - Measurement Strategy

Apply

- Operationalize.
- Ensure compliance with data definitions.

Measure and Monitor: If you aren't measuring data quality, then you cannot manage it.

- Effectiveness of program.
- Value of program.
- Track and monitor compliance.
- Audit data quality.

Success Stories

Success Story No. 1: Maricopa Integrated Health System — Arizona

The health organization is the largest, uncompensated caregiver in Maricopa County with over 23 health facilities spanning the south-central region of the state. It consists of a burn center, five level-one trauma centers, the Arizona Children's Center, a refugee women's health clinic, 14 family health centers and a cancer center.

The system was experiencing significant data challenges related to data quality and reliability. Information silos, data latency, data ownership and lack of enterprise tools were problematic. In some instances, the issues were evident, such as data discrepancies between enterprise patient registries and the refugee women's clinic patient database. Since common information is no longer reproduced in multiple systems, MIHS no longer has to research, validate and reconcile data discrepancies.

The implementation of data governance has resulted in reduced costs, improved cost effectiveness and increased regulatory reporting accuracy.

Before Data Governance:

- Information silos led to the inability to share data.
- Data discrepancies between databases.
- Data ownership issues.
- Lack of enterprise tools.
- Poor data latency led to issues with real-time access to data.
- Poor data quality made it unreliable and inaccurate.

After Data Governance:

- Data are shared from single source and are reliable, useful, accessible and timely.
- Data are no longer reproduced in multiple systems and are complete, current, precise and relevant.
- Reliable reports are consistent and accurate.

Success Story No. 2: State of Oklahoma Department of Education

Before initiating data governance, the education department and districts completed a survey to gauge the quality of the pipeline of data coming into the agency. The issues mirrored those experienced by the Maricopa Integrated Health System.

Most data issues organizations experience are not unique. By drilling down into those issues, an organization can determine the areas where it needs to focus and determine the outcomes of the data governance program.

The education department's data governance program focused on gaining a better understanding of its data and finding opportunities to reduce the reporting burden on districts.

The implementation of data governance has resulted in reduced costs, reduced reporting burden on districts and the agency, and increased regulatory reporting accuracy.

Before Data Governance:

- Information silos led to the inability to share data.
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- Data ownership issues.
- Lack of enterprise tools.
- Poor data latency led to issues with real-time access to data.
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After Data Governance:

- Better understanding of data across the agency led to improved state and federal reporting and accessible data that could be retrieved in a timely manner.
- A reduction of duplicate data collection reduced the burden on districts and produced higher quality data.
- Reliable reports are consistent and accurate.

Focus and Takeaways

Focus

Data governance programs should have a focus that will change over time. Identifying focus enables an organization to more easily set and prioritize goals, create a clear path to meeting those goals and mature over time.

Possible Focus Areas

- Policy, standards and strategy.
- Data quality.
- Privacy, compliance and security.
- Architecture and integration.
- Business intelligence.
- Management support.

Takeaways

1. Data governance is the practice of making strategic and effective decisions regarding the organization's information assets.
2. The scope of data governance needs to be carefully defined and can be very wide or narrow depending on an organization's need.
3. Data governance requires specific expertise.
4. Management and leadership involvement is critical for success.

Most organizations start with a mass of information that can be compared to a ball of thread. To untangle the ball and create a single source of truth, organizations must follow each strand and determine what should be kept and what should be discarded. This takes time, focus, attention and resources.

Data governance provides many hands to untangle that ball of thread, reducing the time, burden and resources necessary to create a rich, stable data environment.

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