

The strength is in the governance

Help your enterprise build a solid foundation of trusted data.

by Betty Kight and Debbie Smith

Most of us know the expression, “A home built on a weak foundation will creak, leak, crumble and ultimately fall, but a home built on a strong foundation will flourish, provide value and withstand the test of time.” Just as a home is constructed atop solid concrete for strength, a successful business’s data infrastructure is underpinned by reliable data and sound data governance.

Data is an organization’s most valuable asset, and the best way to nurture and protect it is through a governing body that is responsible for setting consistent data standards for the organization. As represented in the data governance pyramid, right, the Enterprise Information Governance Steering Committee, Data Governance Council and the Data Stewardship Team identify agreed-upon terms to define and share data that is implemented across the organization. These standards provide the rules for structuring information, so the data can be reliably read, sorted, indexed, retrieved and, most importantly, trusted by the end users. In short, data standards promote the long-term value of data, allowing the business to flourish.

Overall, a strong data governance structure will manage the availability, usability, integrity and security of the data employed in an enterprise.

Protecting high-quality data

The goal of every organization is to exploit its assets to achieve optimum business value. Data translates to information, which

Data governance pyramid

The three primary levels of data governance accountability:



translates to knowledge. This knowledge improves business execution and enables optimum business performance. There are multiple points in the business process where data offers great value. Data provides information for operational decision making, enabling the organization to answer questions such as: "What customer is on the line

to the call center?" or "What high-volume products are about to be sold out?"

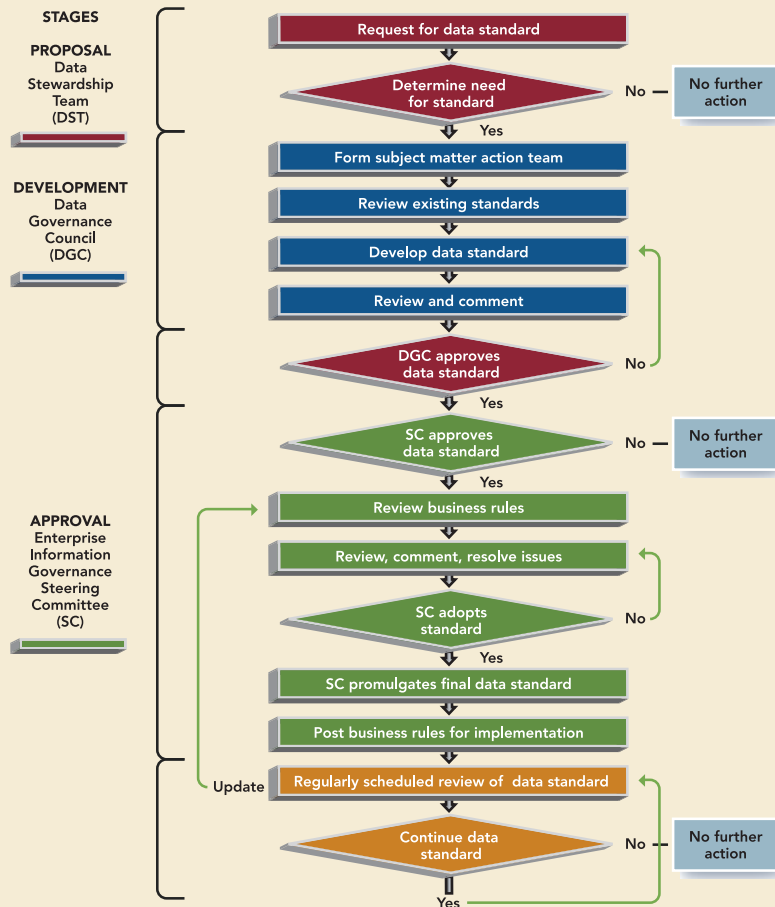
Data also provides information for strategic trending and forecasting analyses used to develop roadmaps and set business objectives such as: "What will be our next marketing campaign?" "Where do we want to be financially next year?" "Should we increase

our product line?" or "Is this a good time to expand our organization?"

It is this understanding of the data's value that ultimately causes organizations to appreciate the obligation to protect their data and ensure long-term viability and usability. This is why establishing a strong data governance team is important. A data governance team will protect and manage the corporate data by developing and integrating appropriate rules, policies, guidelines and standards.

Data governance standards approval process

Every organizational level in the data governance pyramid (see page 77) plays an important role in ensuring that effective standards are defined, developed and implemented. A key accountability of the data governance process is to ensure all systems development initiatives adhere to approved standards. Below is a best practices example of a structured, consistent method for data standards approval and its flow through the governance approval process:



Following a structured approval process provides a consistent method of implementing standards throughout the organization.

Reasons for data continuity

While the logic behind data governance is obvious—and on the surface may even appear easy to implement—the reality is that incorporating a sound structure can be a challenging, albeit worthwhile, endeavor. For instance, data quality and integrity requirements will more than likely differ among diverse business units.

Imagine the different data needs of marketing, accounting, purchasing and the call center. While all of these departments use some of the same data elements, they have different data requirements. For instance, various departments require detailed data while others may not require as great a level of detail.

Furthermore, each entity within an organization may have disparate requirements and understanding of the data elements. These differences can lead users to distrust the data, which can cause those users to create their own ways to capture and store the data. These one-off solutions can quickly become unwieldy and only add inconsistency, inaccuracy, contention and, ultimately, complete data distrust across the entire corporation.

If an appropriate data governance process and a governing body that oversees development, implementation, monitoring and maintenance of all standards relating to data are not put in place, data inaccuracies and inconsistencies will continue. Disparate functional work groups will begin and/or continue to develop their own ways of completing their work. Ultimately, the lack of

data governance or an ineffective data governance will result in:

- > Inconsistency in the meaning and level of detail of the data elements
- > Lack of user trust in the data
- > Duplication of data to different platforms, causing an acceleration in the number and size of siloed data marts
- > Excess time spent verifying the data rather than analyzing it for appropriate decision making
- > Inaccurate data analysis
- > Faulty decisions made on perception rather than reality, which can negatively affect the company and its customers

With this escalation of an uncontrollable and unreliable data environment, few individuals actually know where the data is or even what it is. So, how can organizations mitigate or, better yet, avoid these problems?

Structure, roles and responsibilities

An appropriate data governance process and a governing body are needed to

Establishing a data governance program

- > Identify the “owners” of the data assets.
- > Create an oversight committee.
- > Develop a policy that specifies who is accountable for the data’s accuracy, accessibility, consistency, completeness and updating.
- > Define processes on how the data is to be stored, archived, backed up and protected from mishaps, theft or attack.
- > Establish a set of standards and procedures that defines how the data is to be used by authorized personnel.
- > Implement controls and audit procedures for ongoing compliance, company mandates and government regulations.

oversee development, implementation, monitoring and maintenance of all standards relating to data. The data governance structure is formed to ensure that the authority to manage the data is properly delegated from the senior levels of the organization to the appropriate parties. These parties are held accountable for the effective execution of policies.

It is critical that the governance team outlines the cause and effect of poor data in the organization. With this knowledge, the team can develop solutions to the problems and adopt a means to monitor and evaluate the implementation of those solutions.

A data governance management team consists of business and IT associates whose common goals are to ensure the data’s quality, integrity and usability.

As demonstrated by the data governance pyramid on page 77, data governance requires—and facilitates—collaboration among all levels of the organization to ensure that visionary, strategic and tactical goals are achieved.

Where data governance fits

An important focus for a data governance team is to ensure that data consistency is maintained throughout the enterprise.

Integrated metadata (information about data sources, including how it was derived, business rules and access authorizations) is crucial for producing accurate and consistent information. Metadata management ensures that one definition of data, locations, content, business rules and update frequency is used and understood by everyone across the organization.

Master data management (MDM) is the practice of utilizing data services to consolidate, cleanse and harmonize master data (product numbers, customer names, suppliers, etc.) to avoid data redundancies and inconsistencies, and to ensure data quality and integrity. The goals and objectives of MDM are primarily the same as those of data governance, so in many cases,

organizations begin their data governance program with an MDM focus.

It is important to understand that data governance programs extend beyond metadata management and MDM. Data governance principles dictate that ownership and accountability for the quality of data must reside with the business owners. The focus of data governance is on resolving data issues at the source of the problem and embedding data quality metrics into performance measurements.

Data governance provides the framework for the intersection of IT and business working together to establish confidence and credibility in the enterprise’s information, while metadata management and MDM are subsets of a data governance program.

Ensuring a strong foundation

Data is a critical asset of any organization and should be considered as valuable a resource as buildings and products. For a company to gain a significant competitive advantage, it must focus on managing and using its data effectively. Governance of the data asset is an essential part of achieving that objective.

With a strong data governance structure in place, the entire enterprise can be assured its data is consistent, accurate and timely. Throughout the enterprise, users from front-line employees to the CEO can leverage the information to help drive the company far beyond its competitors. **T**

Betty Kight is a senior data warehousing consultant. Before joining Teradata in 2000, she implemented governance at Union Pacific Technologies as the director of enterprise data warehousing.

Deborah J. Smith, senior data warehousing consultant at Teradata, worked at Kmart Corp. for more than 12 years developing and supporting one of the largest mixed-workload Teradata warehouses. Data governance was an integral part of that environment.