



# Data Governance and EDMS — The Short Story

## What is Data Governance?

Data Governance can be defined as the “exercise of authority and control (planning, monitoring, and enforcement) over the management of data assets.”

Data governance focuses on the issues surrounding data access, protection, compliance, and usage bringing maximum benefit and value to an organization. Data governance programs determine:

- ◆ Who can access which segments of data (and how to minimize unnecessary access and risk)?
- ◆ Who will manage enterprise data and establish a system of accountability for those roles?
- ◆ What policies are developed to maintain compliance with local, state, federal, and other regulations.
- ◆ What tools that can be leveraged to make the most of the data?

The goal of data governance is to enable an organization to manage and protect data as an asset in a sustainable way. Data governance is not data management. Data governance functions to guide data management activities and ensure that data are properly managed.

## Why Perform Data Governance?

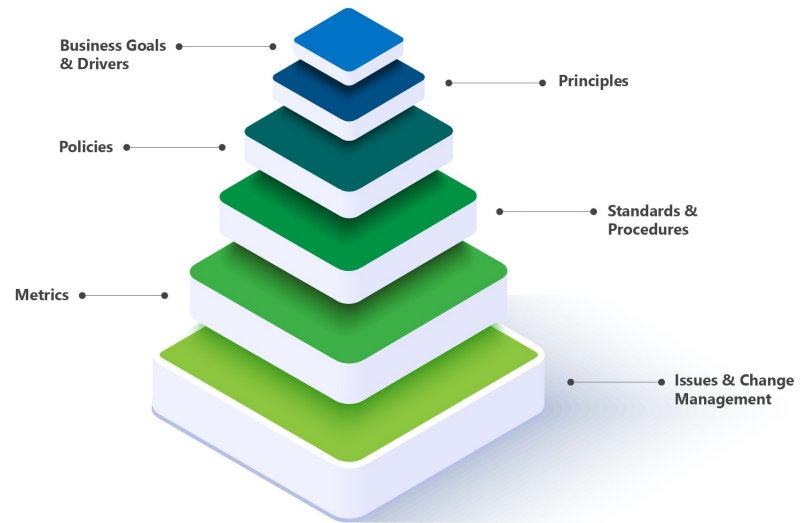
Businesses that have environmental compliance requirements frequently invest in an environmental data management system (EDMS). Common business drivers motivating organizations to invest in an EDMS and data governance include:

- ◆ **Growth / Business Agility** – Arrive at decisions and recommendations faster with increased efficiency and accuracy.
- ◆ **Lower Cost / Operational Efficiency** – Streamline workflows and automate data-related business processes.
- ◆ **Risk Management / Compliance and Security** – Define data standards, policies, and processes with clear roles and responsibilities to ensure compliance with internal and external policies and regulations.
- ◆ **Improve Data Quality** – Ensure data are accurate, complete, timely, relevant for a given use, and consistent with all requirements.
- ◆ **Sustainability** of the organization's data investments.

# Data Governance Elements

Implementation of a data governance program generally entails the following elements:

- ◆ Establishing enterprise-wide principles, policies, and standards for data management practices;
- ◆ Defining the specific roles, responsibilities, and decision rights on data assets; and
- ◆ Establishing and maintaining sustainable processes that provide continuous monitoring and control of the data practices to enforce data-related decisions.



## Principles

Principles are values or beliefs that an organization espouses. Principles are the foundation of data governance policies.

An example principle might be “Information should be secure.”

A description for this principle is “Information should be protected from intentional or accidental corruption or destruction.”

## Policies

Policies can be defined as “directives that codify principles and management intent into fundamental rules governing the creation, acquisition, integrity, security, quality, and use of data and information.” Data policies are generally global, are the “teeth” to the data principles, and describe what to do and what not to do. Data policies support data standards and key aspects of data management and use.

## Standards and Procedures

Standards and procedures describe “how” to do data governance and promote consistent results from processes that follow the standards. Standards help define quality because the standard provides a means of comparison. Standards also have the potential to simplify processes.

## Roles and Responsibilities and the Operating Data Governance Framework

The data governance program must establish formal definitions of roles for accountability and responsibility. Data governance roles revolve around guiding and monitoring information assets. Each organization will adopt an operating data governance model that supports their business framework.

## Metrics

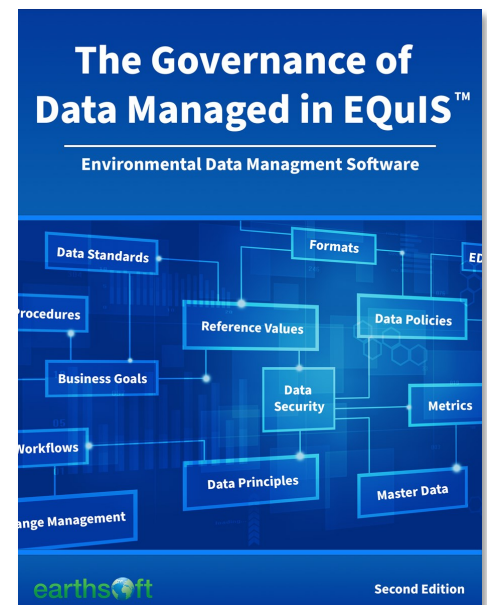
The progress and success of the data governance program in adding business value should be tracked and reported. These metrics will strengthen the sustainability and business leadership support of the data governance program.

# Data Governance Tools

Many artifacts and tools can be created for use in the data governance program. These artifacts and tools should be stored in a location that appropriate personnel in the organization can access with read only permissions while members of the data governance organization have editing permissions. The artifacts and tools should be reviewed on a regular reoccurring basis (e.g., annually) and as needed when issues arise.

EQUS™, developed by EarthSoft, is the most widely used commercial enterprise-level advanced EDMS. EarthSoft provides *The Governance of Data Managed in EQUS* document to help organizations establish their EQUS data governance program. Data governance elements discussed in this document include:

- ◆ Business goals and drivers
- ◆ Data principles
- ◆ Data policies – Data security policy should specifically address EQUS Facility and User permissions, use of EQUS REST API, and data exports
- ◆ Standards and procedures
  - ◆ Procedures for the creation of Plans in the EQUS Sample Planning Module (SPM)
  - ◆ Procedures for the creation of QAPPs for the EQUS Data Qualification Module (DQM )
  - ◆ Standards for EQUS Collect and/or EQUS Data Gathering Engine (EDGE) forms and eCOCs
- ◆ Workflow diagram
- ◆ Data inventory and data quality inventory (of historical data)
- ◆ Reference values
- ◆ Data mapping to EQUS and to EQUS Format(s)
- ◆ Transactional data and metadata format files with valid values and custom handler code
- ◆ Organizational naming conventions (i.e., for locations, samples, unstructured files, etc.)
- ◆ Key performance indicators and metrics
- ◆ Data governance activities
- ◆ Data governance organizational framework with listed roles and responsibilities
- ◆ Issue management processes
- ◆ Change management plan
- ◆ Training materials
- ◆ Communication materials



Contact EarthSoft at [info@earthsoft.com](mailto:info@earthsoft.com) for more information about EQUS and Data Governance.