Data Governance 101

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Name
Agency
Your Data Journey?
Enterprise Data Management (EDM) is an integrated discipline for structuring, describing, and governing data assets across organizational and technological boundaries to improve efficiency, promote transparency, and enable business insight.
Data Governance Definitions

The exercise of authority and control over the management of data assets – DMBoK

A convergence of data quality, data management, business process management, and risk management surrounding the handling of data in an organization – Wikipedia

A system of decision rights and accountabilities for information-related processes, executed according to agreed-upon models which describe who can take what actions with what information, and when, under what circumstances, using what methods – Data Governance Institute
Enterprise Data Governance (EDG) is the formal orchestration of people, process, and technology to enable an organization to leverage data as an enterprise asset. (source MDM Institute)
**Data Governance and Stewardship Definition**

**Enterprise Data Governance (EDG)** is the formal orchestration of people, process, and technology to enable an organization to leverage data as an enterprise asset.

**Data Stewardship** is an approach to data governance that formalizes accountability for managing information resources in the best interest of the organization.
Data Governance as a practice

- A series of activities to assess, design, plan, and implement policy, processes, and organizational bodies, including data stewards, decision boards, and enterprise data management organizations, that guide decisions about data and information assets.

- Data Governance ensures that information and data
  - Are tightly aligned with enterprise goals and objectives and support the performance of the enterprise mission
  - Are used to enable the enterprise by exploiting opportunities and maximizing benefits
Data Governance Program

Governance Tiers

Strategic
- Executive Steering Committee (ESC)
- Executive Leadership Team

Collaborative
- Data Governance Council
- Business Domain SMEs working together to govern domain data via chartered working groups (CWG)

Operational
- Data Stewardship Committee
- Individual business and/or Technical Subject Matter Experts
Executive Steering Committee – Strategic

The specific tasks for which the Strategic Data Stewards will be responsible include, but are not limited to:

- Establishing or assigning authority over particular set(s) of data to the appropriate Collaborative Data Stewardship bodies
- Promoting a culture which values and shares enterprise data assets, by facilitating the necessary education and communication.
- Promoting the assignment of adequate resources in the Collaborative and Operational Stewardship areas of responsibility in order to accomplish strategic goals.
Collaborative Data Stewardship consists of individuals or bodies from the business units who are tasked with ensuring that data within their authority are defined and managed from an enterprise perspective.

- Approval of data asset-related data objects and elements to ensure the widest possible usage and understanding
- Definition and monitoring of data standards used in the collection or management of data
- Identification and definition of key terms for development of an enterprise-wide glossary
- Identification and verification of data sensitivity levels
- Creation, harmonization, and governance of enterprise code sets.
- Development of data validation rules to preserve or improve data integrity and trust.
- Development of recommendations for policy changes required to ensure appropriate information sharing, or measurement of data quality.
Those who serve as Operational Data Stewards may come from either the business or IT organization units, and be full-time, part-time or temporary in terms of their support. They might be in-house personnel, or come from outside of the organization (e.g., contingent workers).

- Providing subject matter expertise to assist with drafting data definitions, standard names, project scoping, impact analysis, establishing data quality standards, and assigning data sensitivity levels
- Providing candidate data definitions for review and approval by the appropriate CWG(s)
- Preserving the quality of data that is entered into a particular database or system
- Capturing data in a timely and appropriate fashion
- Communicating concerns about data quality to the CWG(s) responsible for the data
- Validation and approval of the data asset metadata
DMBOK - Data Governance in Context

Definition: The exercise of authority and control (planning, monitoring, and enforcement) over the management of data assets.

Goals:
1. To define, approve, and communicate data strategies, policies, standards, architecture, procedures, and metrics.
2. To track and enforce regulatory compliance and conformance to data policies, standards, architecture, and procedures.
3. To sponsor, track, and oversee the delivery of data management projects and services.
4. To manage and resolve data related issues.
5. To understand and promote the value of data assets.

Activities:
1. Data Management Planning (P)
   - Understand Strategic Enterprise Data Needs
   - Develop and Maintain the Data Strategy
   - Establish Data Professional Roles and Organizations
   - Identify and Appoint Data Stewards
   - Establish Data Governance and Stewardship Organizations
   - Develop and Approve Data Policies, Standards, and Procedures
   - Review and Approve Data Architecture
   - Plan and Sponsor Data Management Projects and Services
   - Estimate Data Asset Value and Associated Costs

2. Data Management Control (C)
   - Supervise Data Professional Organizations and Staff
   - Coordinate Data Governance Activities
   - Manage and Resolve Data Related Issues
   - Monitor and Ensure Regulatory Compliance
   - Monitor and Enforce Conformance With Data Policies, Standards, and Architecture
   - Oversee Data Management Projects and Services
   - Communicate and Promote the Value of Data Assets

Inputs:
- Business Goals
- Business Strategies
- IT Objectives
- IT Strategies
- Data Needs
- Data Issues
- Regulatory Requirements

Suppliers:
- Business Executives
- IT Executives
- Data Stewards
- Regulatory Bodies

Participants:
- Executive Data Stewards
- Coordinating Data Stewards
- Business Data Stewards
- Data Professionals
- DM Executive
- CIO

Tools:
- Intranet Website
- E-Mail
- Meta-data Tools
- Meta-data Repository
- Issue Management Tools
- Data Governance KPI
- Dashboard

Primary Deliverables:
- Data Policies
- Data Standards
- Resolved Issues
- Data Management Projects and Services
- Quality Data and Information
- Recognized Data Value

Consumers:
- Data Producers
- Knowledge Workers
- Managers and Executives
- Data Professionals
- Customers

Metrics:
- Data Value
- Data Management Cost
- Achievement of Objectives
- # of Decisions Made
- Steward Representation / Coverage
- Data Professional Headcount
- Data Management Process Maturity
Getting Started

Assess context

Define DG roadmap

Secure executive mandate

Assign Data Stewards

Execute plan

Evaluate results

Revise plan

Apply change management

(Occurs once)

(Repeats)
Principles and Goals

- To define, approve, and communicate data strategies, policies, standards, architecture, procedures, and metrics.
- To track and enforce regulatory compliance and conformance to data policies, standards, architecture, and procedures.
- To sponsor, track, and oversee the delivery of data management projects and services.
- To manage and resolve data related issues.
- To understand and promote the value of data assets.
Primary Deliverables

- Data Principles
- Communication Strategy
- Operational Model
- Business Glossary
- Data Governance Scorecard and Roadmap
- Data Policies
- Data Standards
- Data Management Projects and Services
- Quality Data and Information
- Recognized Data Value
Roles and Responsibilities

Suppliers
- Business Executives
- IT Executives
- Data Stewards
- Regulatory Bodies

Participants
- Chief Data Officer
- Data Stewards (Business and Technical)
- Chief Information Officer
- Data Professionals

Consumers
- Data Producers
- Knowledge Workers
- Managers and Executives
- Data Professionals
- Customers
Data Governance and Stewardship:

- Unleashes the power of the data
- Establishes accountability
- Enables reuse
- Captures institutional knowledge
- Establishes Communication Channels
- Creates Data Community
- Bridges gaps between IT and Business
- Cultural Change Agent
- Rigor = Agility
## Goals of Governance

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<thead>
<tr>
<th>Visible</th>
<th>Responsive</th>
<th>Understandable</th>
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| Data is discoverable by stakeholders  
Metadata is published in a shared space | Data can be appropriately interpreted  
Consistently represents the same business facts regardless of source  
Definitions and semantics are well documented | Data is managed from an enterprise perspective  
Data and processes are governed with efficient and sustained leadership and accountability  
Actionable data enabling informed enterprise planning, transformation (consolidation, virtualization, etc.), and investment decisions |
| Accessible | Data is validated by robust, direct user feedback mechanisms  
Data is relevant to the business requirements  
Increased operational efficiencies and resource preservation  
Easy, fast data access, greater agility | Governed |
| Data is readily available for use by authorized stakeholders  
Data is connected to the network(s)  
Tools are readily available to use and allow assured access to data  
Enhanced data security | Trusted |  |
| Data Quality is measured and published  
Data is substantiated through authoritative pedigree and lineage  
Improved data transparency | |

**Interoperable**

- Data can be easily combined or compared with other information and/or mediated

**Visible**

- Data is discoverable by stakeholders
- Metadata is published in a shared space

**Responsive**

- Data is validated by robust, direct user feedback mechanisms
- Data is relevant to the business requirements
- Increased operational efficiencies and resource preservation
- Easy, fast data access, greater agility

**Understandable**

- Data can be appropriately interpreted
- Consistently represents the same business facts regardless of source
- Definitions and semantics are well documented

**Governed**

- Data is managed from an enterprise perspective
- Data and processes are governed with efficient and sustained leadership and accountability
- Actionable data enabling informed enterprise planning, transformation (consolidation, virtualization, etc.), and investment decisions

**Accessible**

- Data is readily available for use by authorized stakeholders
- Data is connected to the network(s)
- Tools are readily available to use and allow assured access to data
- Enhanced data security

**Trusted**

- Data Quality is measured and published
- Data is substantiated through authoritative pedigree and lineage
- Improved data transparency
Tips and Tricks

- Elevate what works common practices
- Harvest intuitional knowledge
- Give Credit where credit is due
- Start with a quick win
- Do not re-invent the wheel but use templates, models and best practices that are already available on the market. Tailor for your agency and align to the state.
- Find Champions at all levels of the organization
- Monetize or value your efforts
# State of Texas Data Focus

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<th>Data Management</th>
<th>Data Sharing</th>
<th>Data Analytics</th>
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<td>Open Data Portal</td>
<td>Data Literacy &amp; Culture</td>
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