**Planning is Needed to
Fully Implement Data Governance
at Milwaukee County**

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Milwaukee County Office of the Comptroller
Audit Services Division

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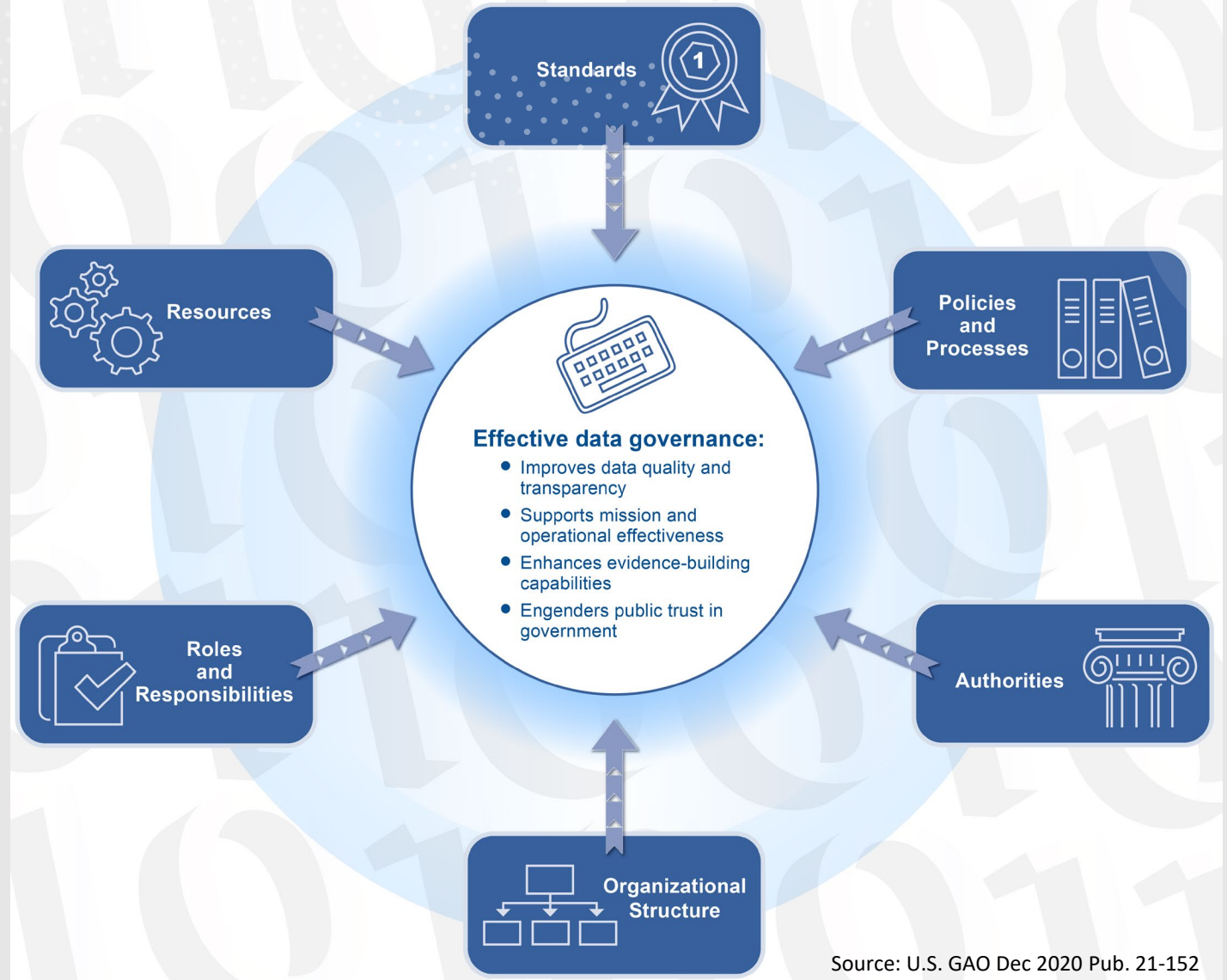**Audit Team**
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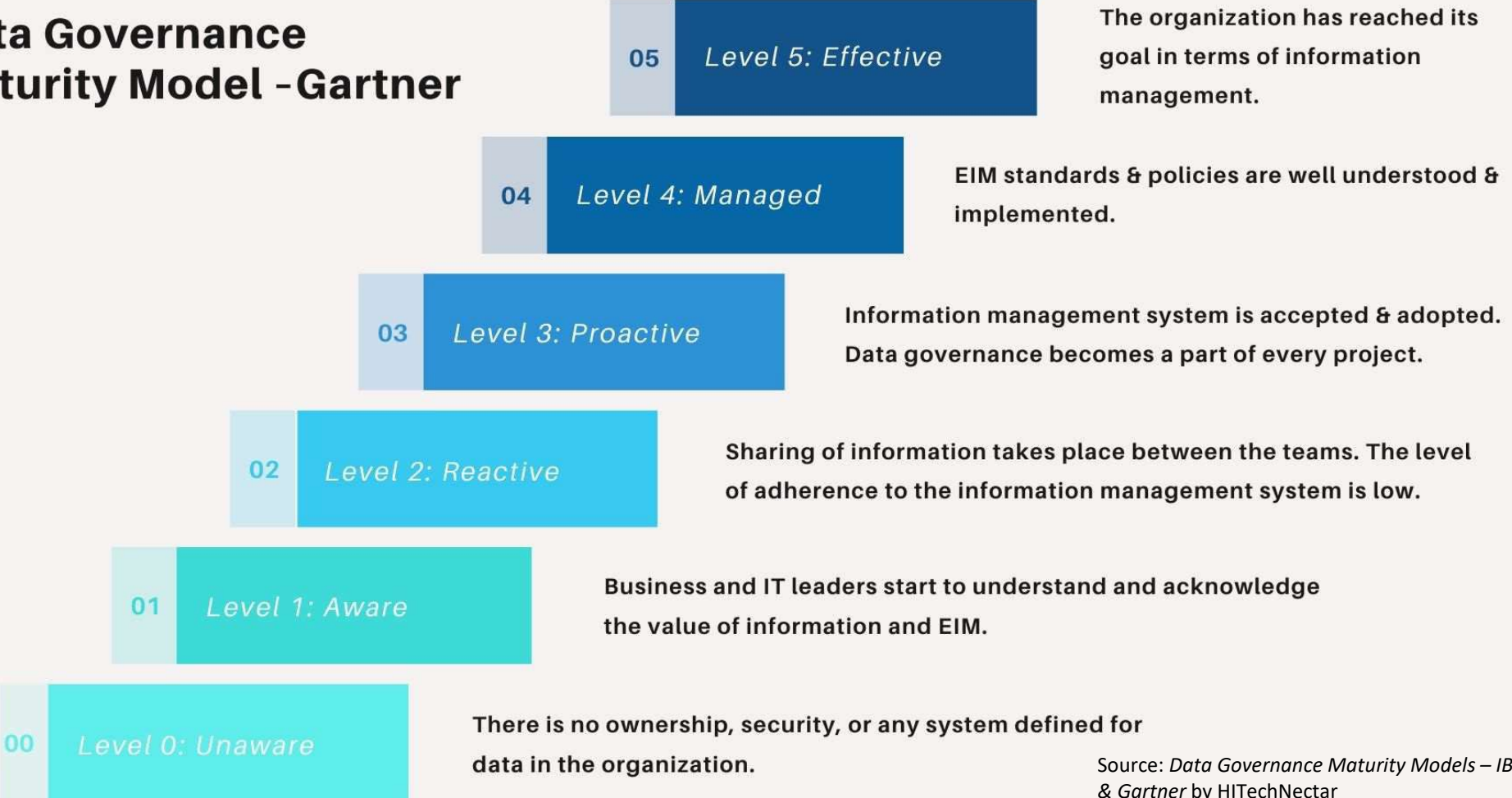Cheryl A. Hosp

What is Data Governance?

- It is the framework or structure for ensuring that an agency's data assets are transparent, accessible, and of sufficient quality to support its mission, improve the efficiency and effectiveness of agency operations, and provide useful information to the public.

- Data Governance refers to the roles, responsibilities, policies, and procedures for making decisions to ensure effective data management, while data management is implementing those decisions.

Standards

Resources

Policies and Processes

Roles and Responsibilities

Authorities

Organizational Structure

Effective data governance:
- Improves data quality and transparency
- Supports mission and operational effectiveness
- Enhances evidence-building capabilities
- Engenders public trust in government

Source: U.S. GAO Dec 2020 Pub. 21-152

While the composition of data governance models varies, we found common themes for the benefits and the general structure. There were three common phases of a data governance plan: initiation, implementation and outcome. Maturity models score a government's progress on their data governance plans. Two of the most common used are IBM and Gartner.

Data Governance Maturity Model – Gartner

05 Level 5: Effective — The organization has reached its goal in terms of information management.

04 Level 4: Managed — EIM standards & policies are well understood & implemented.

03 Level 3: Proactive — Information management system is accepted & adopted. Data governance becomes a part of every project.

02 Level 2: Reactive — Sharing of information takes place between the teams. The level of adherence to the information management system is low.

01 Level 1: Aware — Business and IT leaders start to understand and acknowledge the value of information and EIM.

00 Level 0: Unaware — There is no ownership, security, or any system defined for data in the organization.

Source: *Data Governance Maturity Models – IBM & Gartner* by HITechNectar

3

IMSD has contracted with both Gartner and Info-Tech for assistance in data governance and other deliverables. The calculation of the County's maturity score was reported by Gartner for 2018 – 2020 and it was scored as an emerging discipline. The County's score was comparable to other governments.

Gartner Annual Maturity Score for Milwaukee County and Government Benchmark		
Year	**Milwaukee County Score**	**Government Benchmark Score**
2018*	2.5	2.6
2019	2	2
2020	2	2

*2018 was final year Gartner used decimals in its scoring system.

Info-Tech held a Data Strategy Workshop in April of 2022 where strategies included data governance, data architecture and enterprise management. The 2023 Adopted Budget included Annual Performance Measures based on Info-Tech's IT satisfaction scorecard.

Annual Performance Measures in 2023 Adopted Budget			
Performance Measure	**2021 Actual**	**2022 Target**	**2023 Target**
Project Business satisfaction and importance	68%	70%	72%
variance to industry standards	-2%	0%	0%
IT Satisfaction	72%	75%	75%
variance to industry standards	-4%	0%	2%
IT Value	72	75	80
variance to industry standards	-3%	0%	2%

The County has employee directives in place related to data which are included in an employee's daily login and in the Employee Handbook.

Information Management Services Division

Department of Administrative Services

Title:	Acceptable Use of Information Technology	Issue Date: 11/03/2021
Approval	Information Security Council	Supersedes: 04/15/2020

Contact	IMSD Service Desk: Information Management Services Division Contact the Service Desk regarding requests, incidents, and approvals. Email: HelpIMSD@milwaukeecountywi.gov

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MILWAUKEE COUNTY
CountyConnect

Milwaukee County Employee Handbook

Updated: 01/24/2023

🏠 > CountyConnect > Human Resources > Employee Handbook > Milwaukee County Employee Handbook

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Acceptable Use of Information Technology

Overview

Milwaukee County established the Administrative Directive on Acceptable Use of Technology to protect employees, partners and the County from illegal or damaging actions by individuals; either knowingly or unknowingly. Internet/Intranet/Extranet-related systems, as well as computer equipment, software, operating systems, storage media, network accounts providing electronic mail, WWW browsing, and FTP, are the property of the County. These systems are to be used for business purposes in serving the interests of the County in the course of normal operations. It is the responsibility of every employee to know the guidelines within the Administrative Directive on Acceptable Use of Technology and to conduct their activities accordingly.

Purpose

The purpose of the policy is to outline and define the appropriate uses of the Internet by Milwaukee County employees and affiliates. These rules are in place to protect employees and the County. Inappropriate use exposes employees and the County to risks including but not limited to virus attacks, compromise of network systems and services, and legal issues.

Challenges exist at the County which hinder the development of a data governance program. They include:

- 253 IT systems in place at the County according to IMSD.
- Several large system are deployed and owned by individual departments.
- Some departments, like the Airport, have their own IT staff.
- A siloed IT system where often no one owns the data.
- Data ownership crossing departments.
- Departments with a blend of State and County employees, equipment and software systems.
- Confusion between vendor and County ownership of data by departments.
- The County's current fiscal environment. The Comptroller in March of 2023 projected an $18.3 million structural deficit for 2024.

IMSD has begun work on a data governance plan for the County but there is not currently a formal data governance plan. Given the County's siloed nature, state of data ownership, and blend of State and County employees moving beyond stand-alone policies is important. The County also currently lacks a policy direction from policymakers to make data governance a priority, therefore, we recommended that:

1. *IMSD present a documented plan to implement a data governance program at Milwaukee County to the County Board within six months that includes:*
    - *roles and responsibilities*
    - *the time frame and next steps*
    - *feasibility within the County's IT structure*
    - *projected fiscal impact*
    - *staffing and related costs*

We reviewed other governmental data governance programs and found a common theme that few government entities had fully formed data governance programs.

Status of Data Governance Plans at Select Outside Agencies					
Agency	Plan Adopted	Planning Stages	No Written Plan	Written Plan	Some Elements implemented
Minnesota Department of Transportation				X	
WI Dept of Public Instruction	X			X	
Milwaukee Public Schools			X		
University of WI-Milwaukee			X		X
City of Milwaukee	X	X			
University of WI-Madison	X	X			

These other governments could be a valuable resource for IMSD. We believe that as the County begins to plan its data governance program, that IMSD seek guidance from governmental entities who have successfully initiated or implemented data governance programs. We recommend:

2. In developing the data governance plan, IMSD should seek guidance from governmental entities who have successfully initiated or implemented data governance programs.

In two prior audits we conducted, the Board voted to approve recommendations that directed work to be performed on the County's contract ordinance, policies and procedures. While that work is ongoing, we found that IMSD has developed directives and standards to assist within its department with contracts that involve data or access to data.

IMSD has employed directives related to data access and use by outside vendors:
* The *Acceptable Use of Information Technology for Vendors* provided guidance and parameters for vendors accessing the County's information systems.
* After 2021, vendors were included in the County's overall *Acceptable Use of Information Technology* Directive.
* *The Remote Network Access* directive which defines the requirements for remote access to county networks and systems from outside networks.

In addition to its directives, IMSD uses a Master Service Agreement (MSA)Template for its contract preparation that includes protection for the County's data. We reviewed a select number of IT contracts executed outside of IMSD and found not all contracts included all of the items in IMSD's MSA.

Items we found include:

* Data security levels not at the same level as the IMSD MSA.
* County access to data not the same level as the IMSD MSA.
* Data record retention years varied. Some had standalone data retention clauses while others relied upon the Right to Audit Clause which contains a data retention statement. This resulted in some contracts calling for seven years of record retention while some called for three years.

We made three recommendations related to IT contracts.

We found that IMSD has developed tools to assist their department in executing contracts with protection of County data including their Master Service Agreement and their Acceptable Use of Information Technology and Remote Network Access directives that could be beneficial to other County departments, therefore we recommend:

3. IMSD should evaluate items within its Master Service Agreement for countywide applicability and recommend to DAS Procurement for inclusion. Items recommended for review include data protections, Acceptable Use of Information Technology directive, Remote Network Access directive and access and ownership of data.

Given the decentralized nature of contracting and issues we found in our prior audit, the County is working on establishing contracting procedures to close out two prior audit recommendations. Therefore, we recommend:

4. IMSD should present to the Director of the Department of Administrative Services any identified countywide items which should be included in the contract AMOP as work is continuing on the contract AMOP at the County.

We found that there is a variance within County contracts on the inclusion of an independent record retention clause versus utilizing the general right to audit clause which has a record retention standard. Given the County has an obligation to public records law and the potential use of the IMSD Master Service Agreement as a guideline to other departments when drafting a contract that includes data provision, we recommend:

5. IMSD should evaluate in consultation with the Office of the Corporation Counsel the need for a separate record retention clause in contracts data-related countywide beyond that of the Audit Clause and recommend changes to DAS Procurement as needed.

The County established a goal of reaching racial equity by 2030 and has continued to emphasize racial equity across the County. It is well established that representation at all levels is an essential element of equity.

Our Vision
By Achieving Racial Equity, Milwaukee Will Be the Healthiest County in Wisconsin

Create Intentional Inclusion

Reflect the full diversity of Milwaukee County at every level of county government.

The creation of multiple committees to implement a data governance program affords the County an opportunity for inclusion and furthering its racial equity goal. The computer and mathematical field is not as diverse by both gender and race/ethnicity when compared to the overall U.S. population Given this reality, it will require additional efforts by the County to be inclusive.

Research has shown that inclusion and representation going beyond hiring and retention of staff yields a positive and productive workplace and product, therefore, we recommend:

6. IMSD create a plan to follow when making the selection of employee representatives for workgroups and committees it establishes to foster inclusion and representation that reflects the demographics, including but not exclusively racial, of Milwaukee County within six months.

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