



# Data Management

# Data Management Topics

- Data - an Enterprise Asset
- Data Management Introduction
- Data Management Frameworks
- Why choose DAMA?
- The DAMA Data Management Framework
- Intro to Data Governance

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“Data is the oil of the 21<sup>st</sup> century”

Peter Sondergaard, Gartner’s chief researcher



“Organizations that do not understand the overwhelming importance of managing data and information as tangible assets in the new economy will not survive.”

Tom Peters, Business thought leader  
(Author of “In pursuit of Excellence”)



# Enterprise Assets are Managed

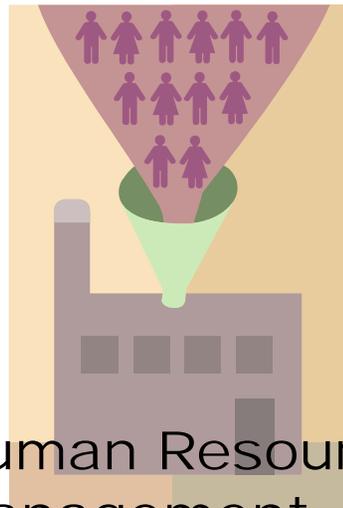
- The General Assembly finds and declares information and information resources to be the strategic assets of the State of Arkansas and that procedures must be established to ensure that information resources are used in an efficient manner [Arkansas Code Annotated § 25-4-102 (a)(1)]

Finance



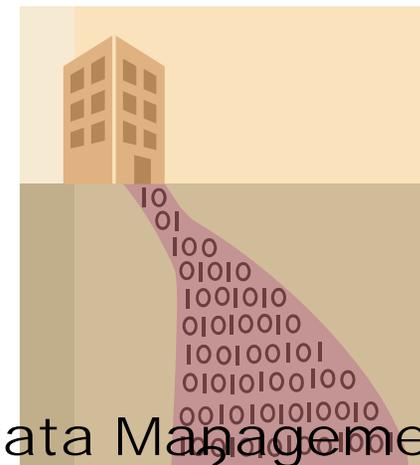
Financial Management

Human Resources



Human Resources Management

Data



Data Management

Stricken language would be deleted from and underlined language would be added to the law as it existed prior to this session of the General Assembly.

**Act 648 of the Regular Session**

1 State of Arkansas  
2 87th General Assembly  
3 Regular Session, 2009

**A Bill**

HOUSE BILL 2200

4  
5 By: Representative Patterson

**For An Act To Be Entitled**

6  
7  
8 AN ACT TO AMEND THE ARKANSAS INFORMATION SYSTEMS  
9 ACT OF 1997, § 25-4-101 ET SEQ.; AND FOR OTHER  
10 PURPOSES.  
11

**Subtitle**

12  
13 TO AMEND THE ARKANSAS INFORMATION  
14 SYSTEMS ACT OF 1997, § 25-4-101 ET SEQ.  
15

18 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

19

20 SECTION 1. Arkansas Code § 25-4-102 is amended to read as follows:

21 25-4-102. Legislative findings and declaration of intent.

22 (a) The General Assembly finds and declares information and  
23 information resources to be strategic assets of the State of Arkansas and  
24 that procedures must be established to ensure that:

25 (1) Information resources are used in an efficient manner;

26 (2) Departmental resources are used unless an exception is  
27 authorized;

28 (3) Information is administered and shared, consistent with  
29 requirements for security, privacy, and confidentiality;

30 (4) Information technology acquisitions meet state needs and are  
31 consistent with coordinated efforts to maximize standardization and cost  
32 effectiveness;

33 (5) State officials have timely access to information in useful  
34 forms; and

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# Data Management aka

- Information Management (IM)
- Enterprise Information Management (EIM)
- Enterprise Data Management (EDM)
- Data Resource Management (DRM)
- Information Resource Management (IRM)
- Information Asset Management (IAM)

# Data Management is NOT

- Database Administration
- Data Administration

# Data Management Is

- A strategic business function
- It comprises of several related disciplines
- Data is a relatively new asset and Data Management is a maturing discipline

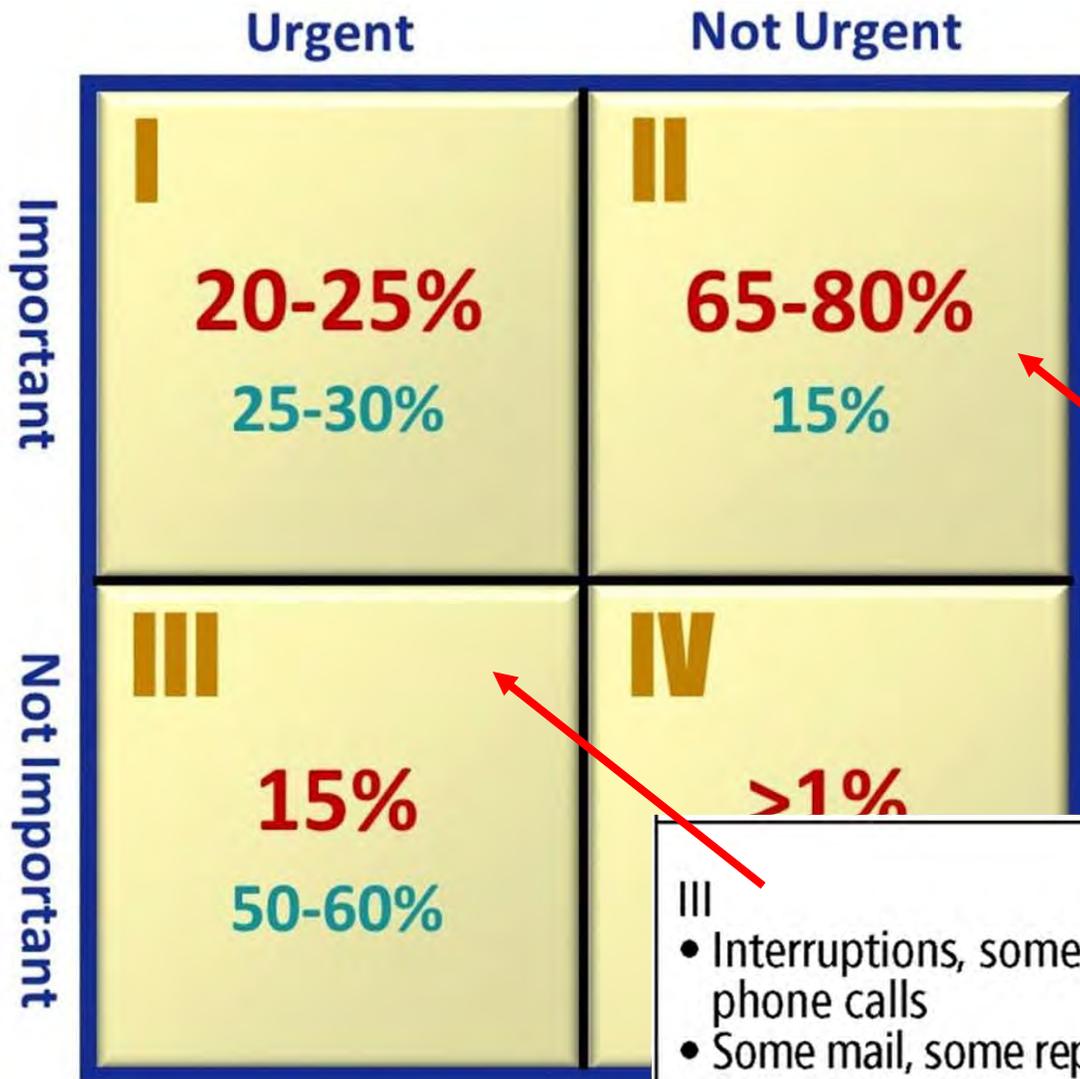
# Time Management

	Urgent	Not urgent
Important	<p>I</p> <ul style="list-style-type: none"><li>• Crises</li><li>• Pressing problems</li><li>• Deadline-driven projects, meetings, preparations</li></ul>	<p>II</p> <ul style="list-style-type: none"><li>• Preparation</li><li>• Prevention</li><li>• Values clarification</li><li>• Planning</li><li>• Relationship-building</li><li>• True re-creation</li><li>• Empowerment</li></ul>
Not important	<p>III</p> <ul style="list-style-type: none"><li>• Interruptions, some phone calls</li><li>• Some mail, some reports</li><li>• Some meetings</li><li>• Many proximate, pressing matters</li><li>• Many popular activities</li></ul>	<p>IV</p> <ul style="list-style-type: none"><li>• Trivia, busywork</li><li>• Some phone calls</li><li>• Time wasters</li><li>• "Escape" activities</li><li>• Irrelevant mail</li><li>• Excessive TV</li></ul>

# Time Management

III

- Interruptions, some phone calls
- Some mail, some reports
- Some meetings
- Many proximate, pressing matters
- Many popular activities



- **High performing organizations**

- **Typical organizations**

- II
- Preparation
  - Prevention
  - Values clarification
  - Planning
  - Relationship-building
  - True re-creation
  - Empowerment

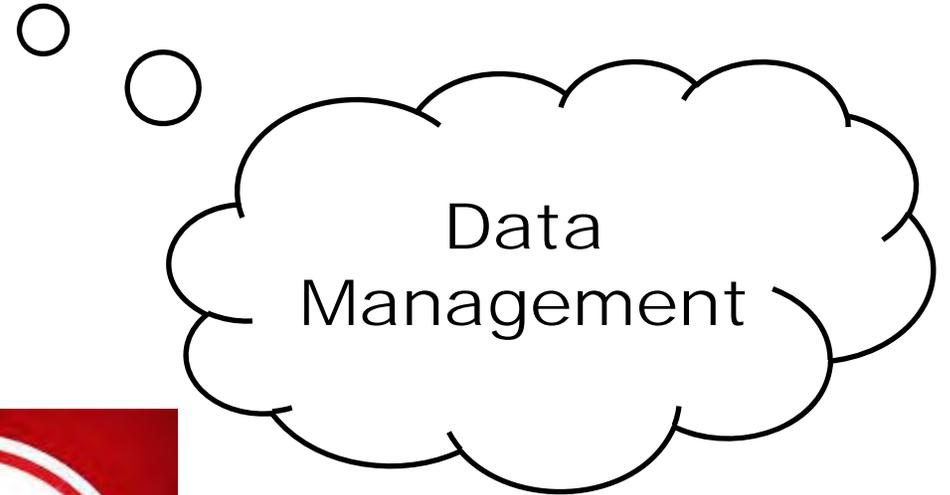
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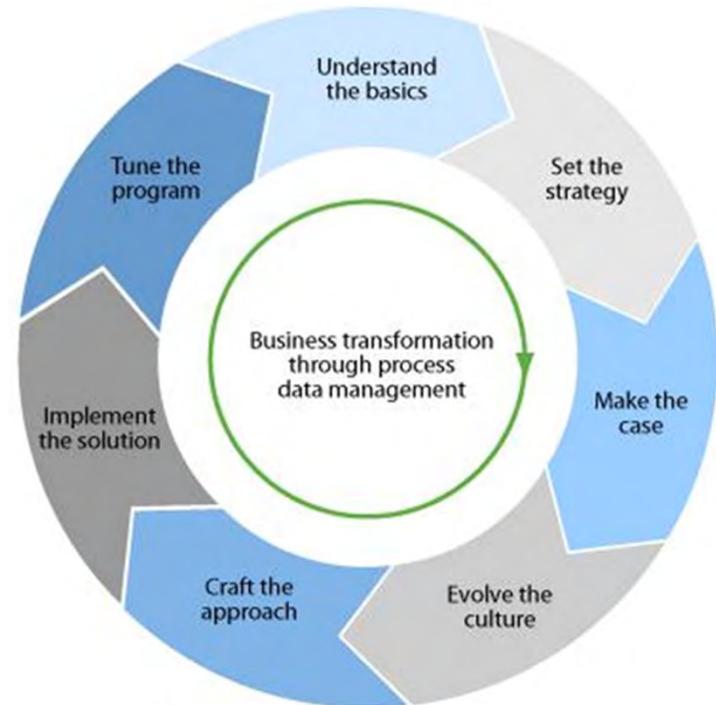
# Framework

“a set of ideas or facts that provide support for something”

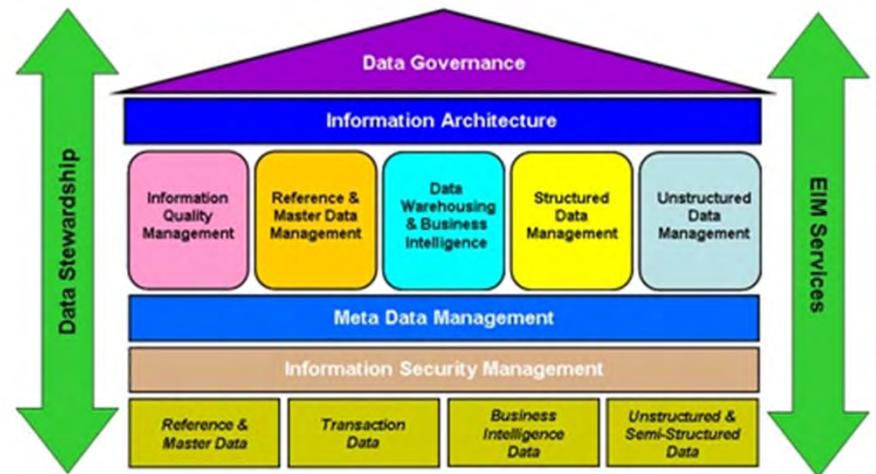




IBM



Forrester Research



EIM Institute.org

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- The premiere organization for data professionals worldwide
- Vendor independent, not-for-profit
- 7500 volunteers in 40 chapters world-wide
- Robust collaboration between academia and industry
- Advises universities in USA & Canada on Data Management courses



- John Zachman
- Peter Chen
- EF Codd
- Larry English
- Bill Inmon
- Robert Seiner
- Barbara Von Halle
- Len Silverston
- Dr. Peter Aiken
- Dr. Richard Wang
- Graeme Simpson

# Tower of Babel



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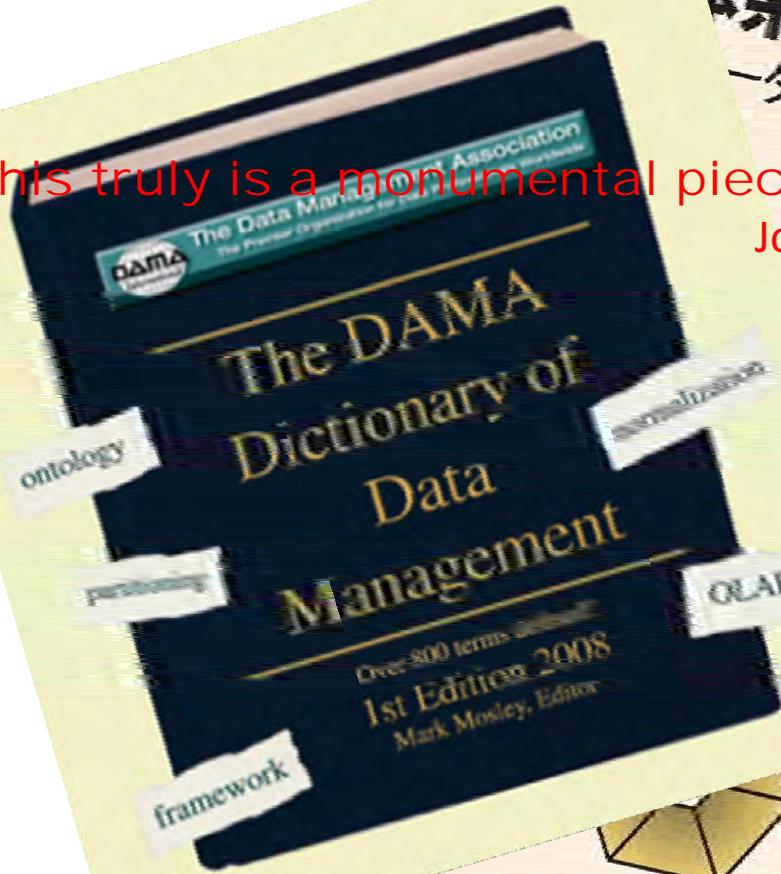


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**The Data Management Association**  
 The Premier Organization for Data Professionals Worldwide

データ管理  
 体系ガイド  
 一タ総研 監訳

"This truly is a monumental piece of work"

John A. Zachman, 2008



ment  
 dge





- Consensus driven
  - Standard Definitions
  - Scope & Boundaries
  - Common Issues
  - Guiding principles

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# Data Management: Definition

The planning, execution and oversight of policies, practices and projects that acquire, control, protect, deliver, and enhance the value of data and information assets.

# Data Management: Goals

- To understand the information needs of the enterprise
- To capture, store, protect, and ensure integrity of data assets
- To continually improve the quality of data and information
- To ensure privacy and confidentiality
- To maximize effective use of data assets.

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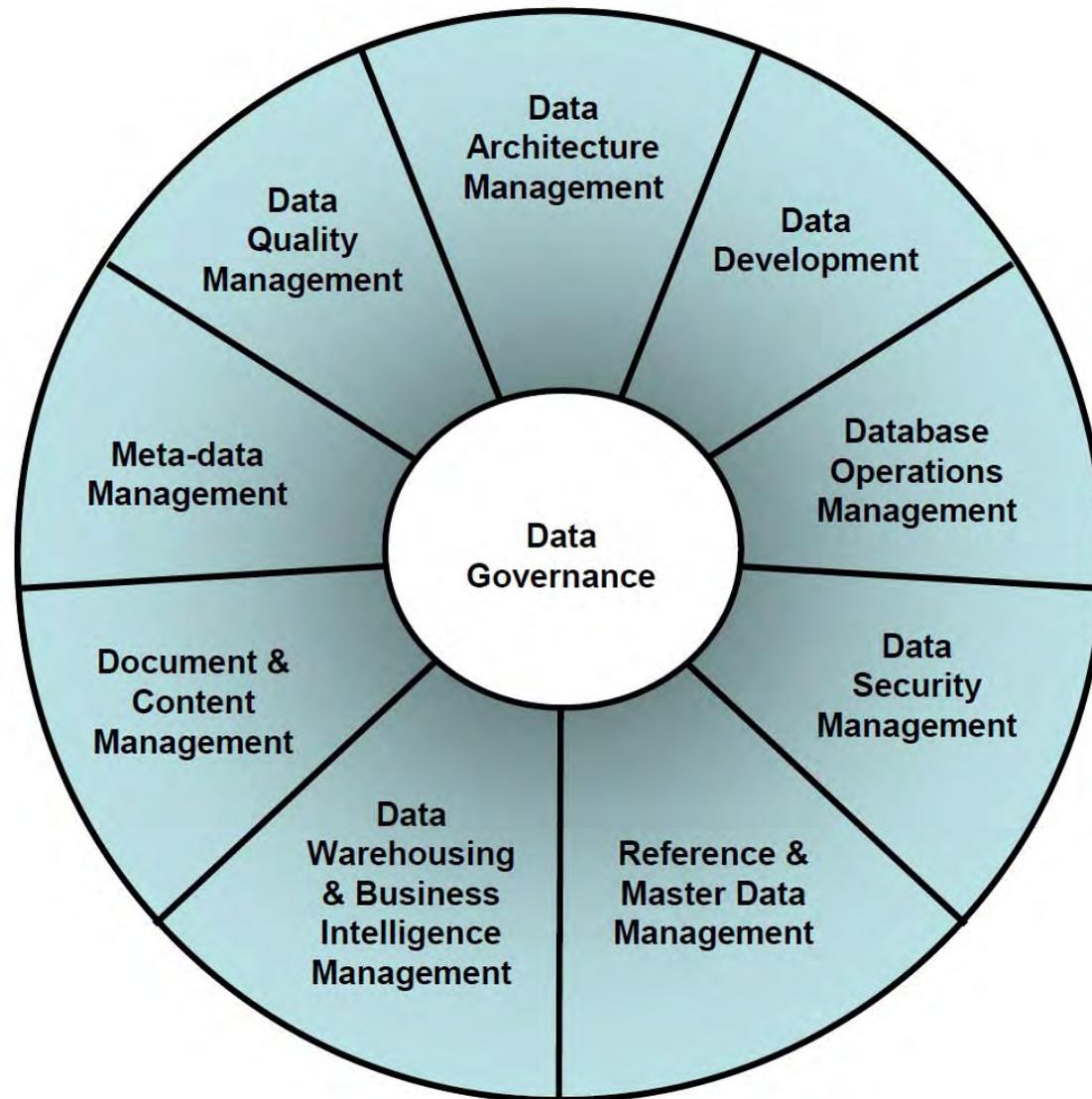
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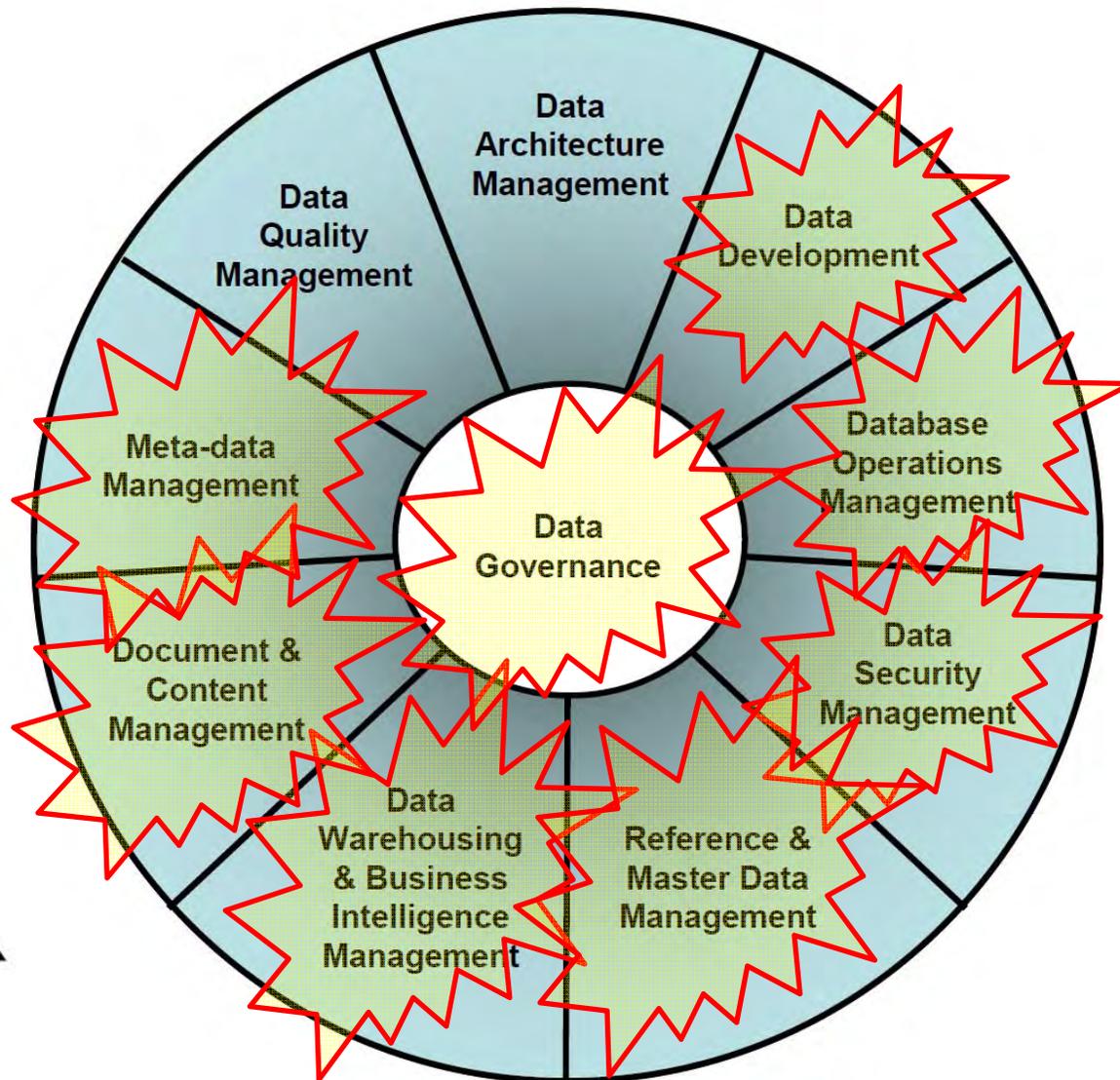
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# Data Management Framework



# Your Mileage May Vary



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# 1. Data Governance

**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.



**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

**Activities:**

**1. Data Management Planning (P)**

1. Understand Strategic Enterprise Data Needs
2. Develop and Maintain the Data Strategy
3. Establish Data Professional Roles and Organizations
4. Identify and Appoint Data Stewards
5. Establish Data Governance and Stewardship Organizations
6. Develop and Approve Data Policies, Standards, and Procedures
7. Review and Approve Data Architecture
8. Plan and Sponsor Data Management Projects and Services
9. Estimate Data Asset Value and Associated Costs

**2. Data Management Control (C)**

1. Supervise Data Professional Organizations and Staff
2. Coordinate Data Governance Activities
3. Manage and Resolve Data Related Issues
4. Monitor and Ensure Regulatory Compliance
5. Monitor and Enforce Conformance With Data Policies, Standards, and Architecture
6. Oversee Data Management Projects and Services
7. Communicate and Promote the Value of Data Assets

**Tools:**

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

Activities: (P) – Planning (C) – Control (D) – Development (O) - Operational



**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

Figure 3.1 Data Governance Context Diagram

# A common mistake in Data Governance

- Do not put Data Governance under IT leadership
- Instead facilitate & get the business to chair
  - Get the CEO/CEO delegate.

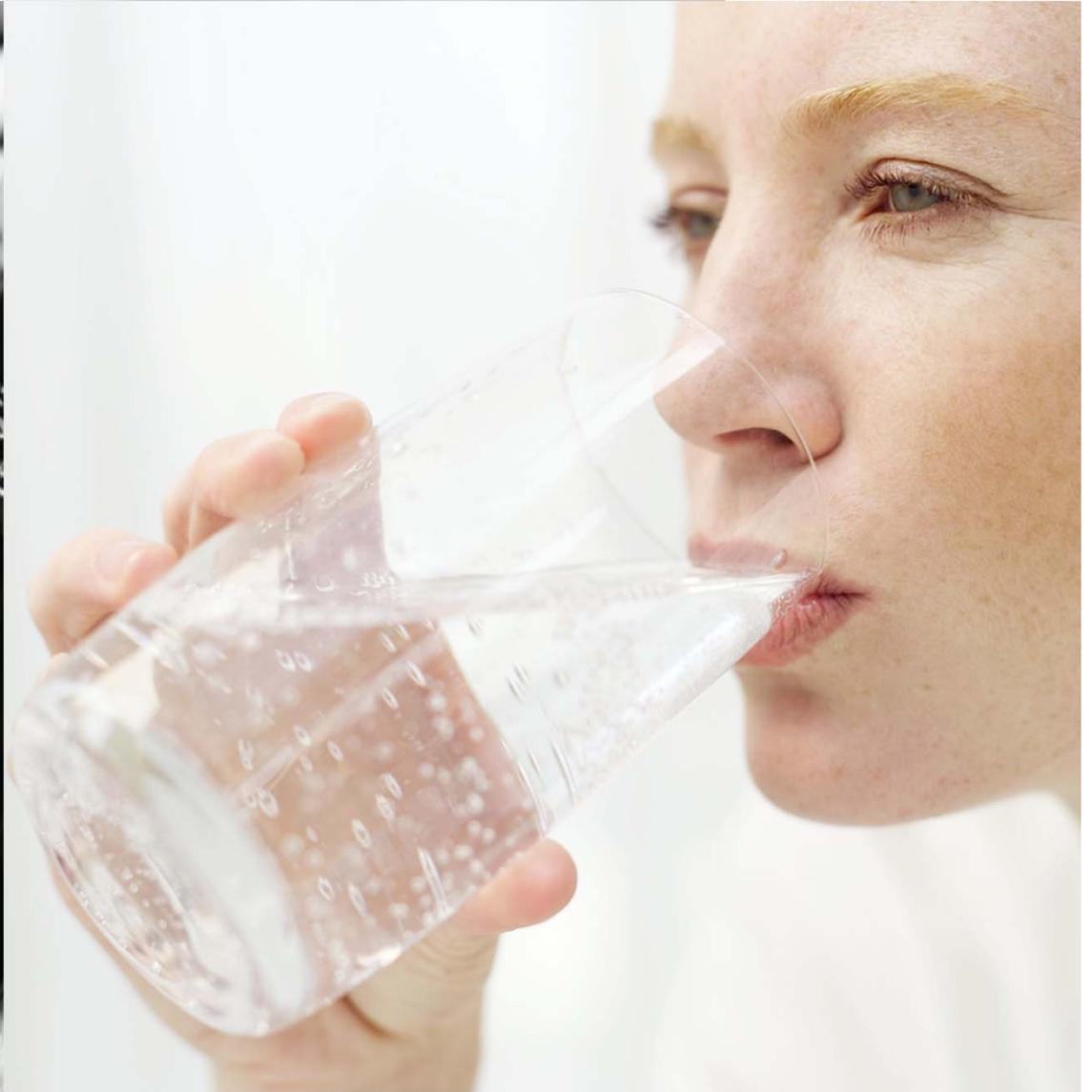


# A common mistake in Data Governance

- Bad data resulting from technical problems are easy to fix
- Bad data resulting from business processes are difficult and need business commitment



# The plumbing versus the water



## Technology focus:

- We deliver, measure, monitor tech
- someone else puts information into



## Information focus:

- If information were the center of Copernicus, what would we do differently?

Copernicus

The change  
informa  
Copern



Church.

# Where do I go from here?

- Revisit time management quadrant – you are the CIO and top custodian of a new enterprise asset.
- Get the [DAMA Data Management publication](#) .
- Ask DIS Enterprise Architecture group to get you in touch with appropriate SMEs
- Join [Dataversity](#) for free webinars on subjects of interest
- Attend [“Enterprise Data World”](#) or [“Data Governance”](#) conferences

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