Data Governance 101: Building a Foundation for Effective Data Management

Principles, Frameworks, and Best Practices

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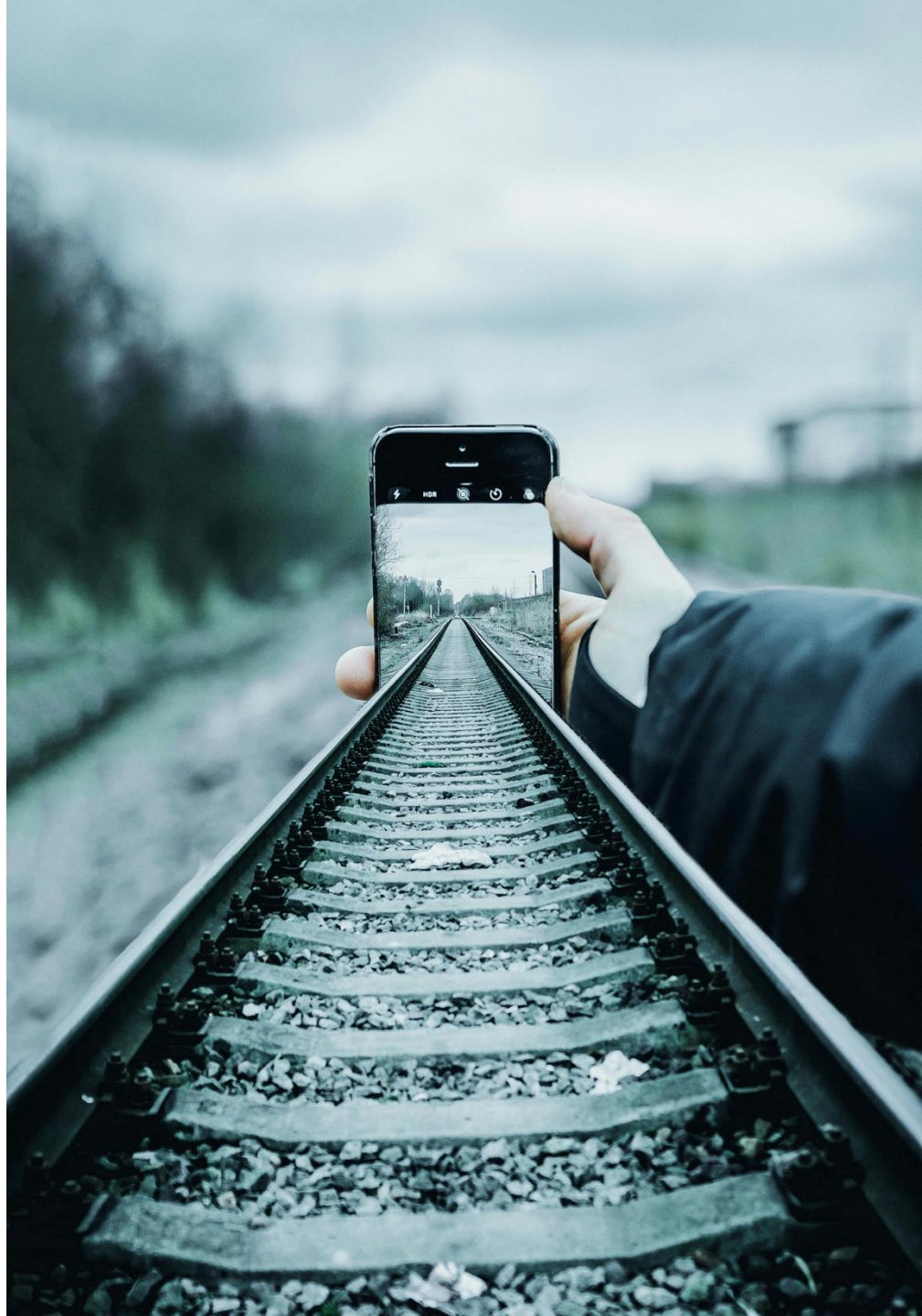
Welcome & Agenda

- What is Data Governance and Data Management?
- Why DG Matters?
- What Data Governance Managers Actually do?
- Data Governance Vs Data Management
- Different maturity models currently in practice
- DAMA Wheel & Evolved Wheel
- Peter Aiken's Pyramid
- Data Management Principles
- Data Governance Pitfalls
- DG Approach
- Creating a Data Governance Plan (30-60-90 days plan)
- Maturity Journey from 1-5 Years
- Video – Treating Data as an Asset
- Q&A Session



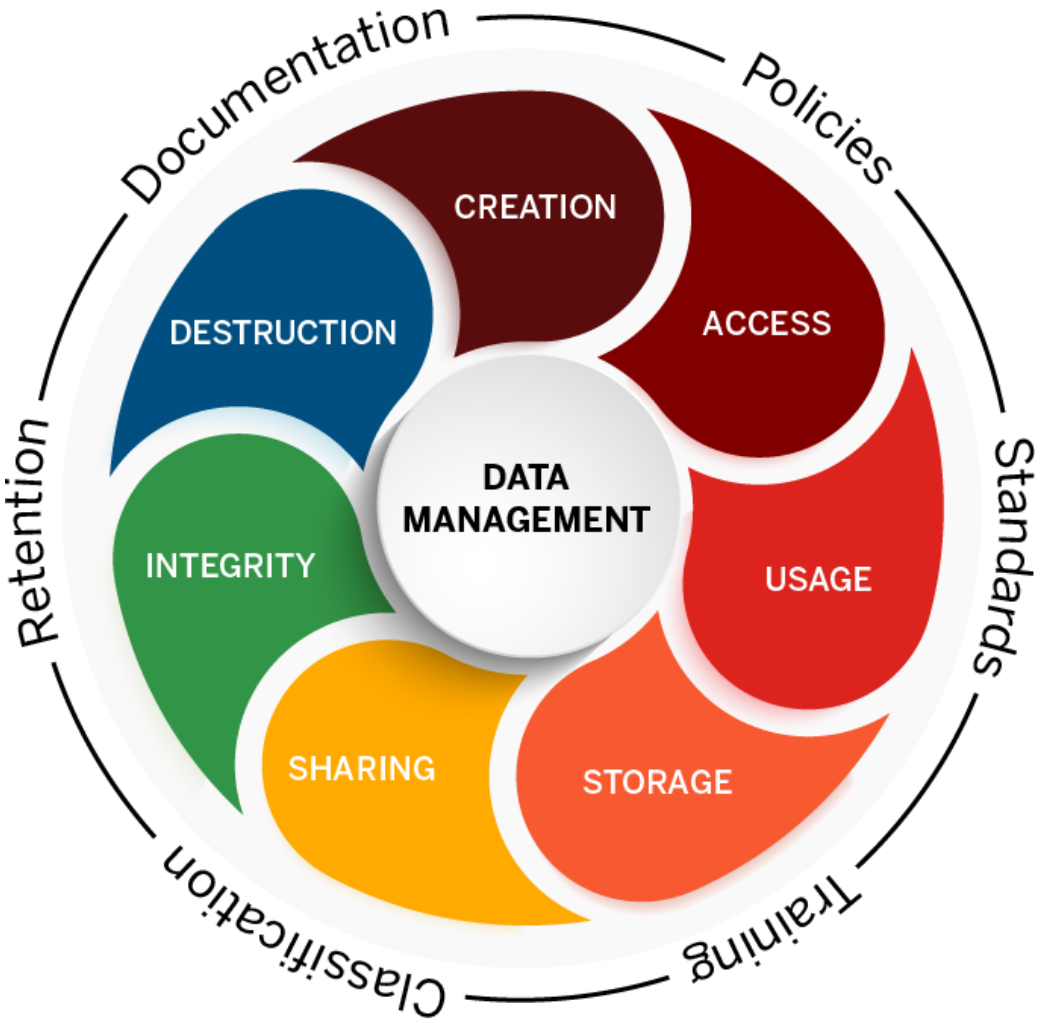
Data Governance and Data Management

Data Governance

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

Data Management

The development, execution, and supervision of plans, policies, programs, and practices that deliver, control, protect, and enhance the value of data and information assets throughout the data lifecycle.



Definitions: DAMA International ©

Why Data Governance Matters?

Ensures Data Quality and Reliability

Enhances Operational Efficiency

Reduces Risk

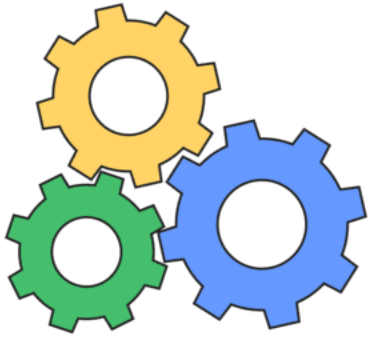
Establishes Accountability and Ownership

Supports Effective Metadata Management

Facilitates Regulatory Compliance

Improves Decision Making

Increases Data Value



Promotes Data Integration and Interoperability

Drives a Data Driven Culture

What Data Governance Managers Actually do?

We solve Data Problems

We work alongside teams to untangle complex data issues and make decisions.

Data Governance Unicorns

We Drive the Data Strategy

We build the frameworks, ownership models, policies, procedures, standards, metrics that bring structure and clarity to how data should be managed which talk to the Data Strategy

We make data quality visible

We establish processes, roles, responsibilities and tooling needed to ensure data quality is managed.

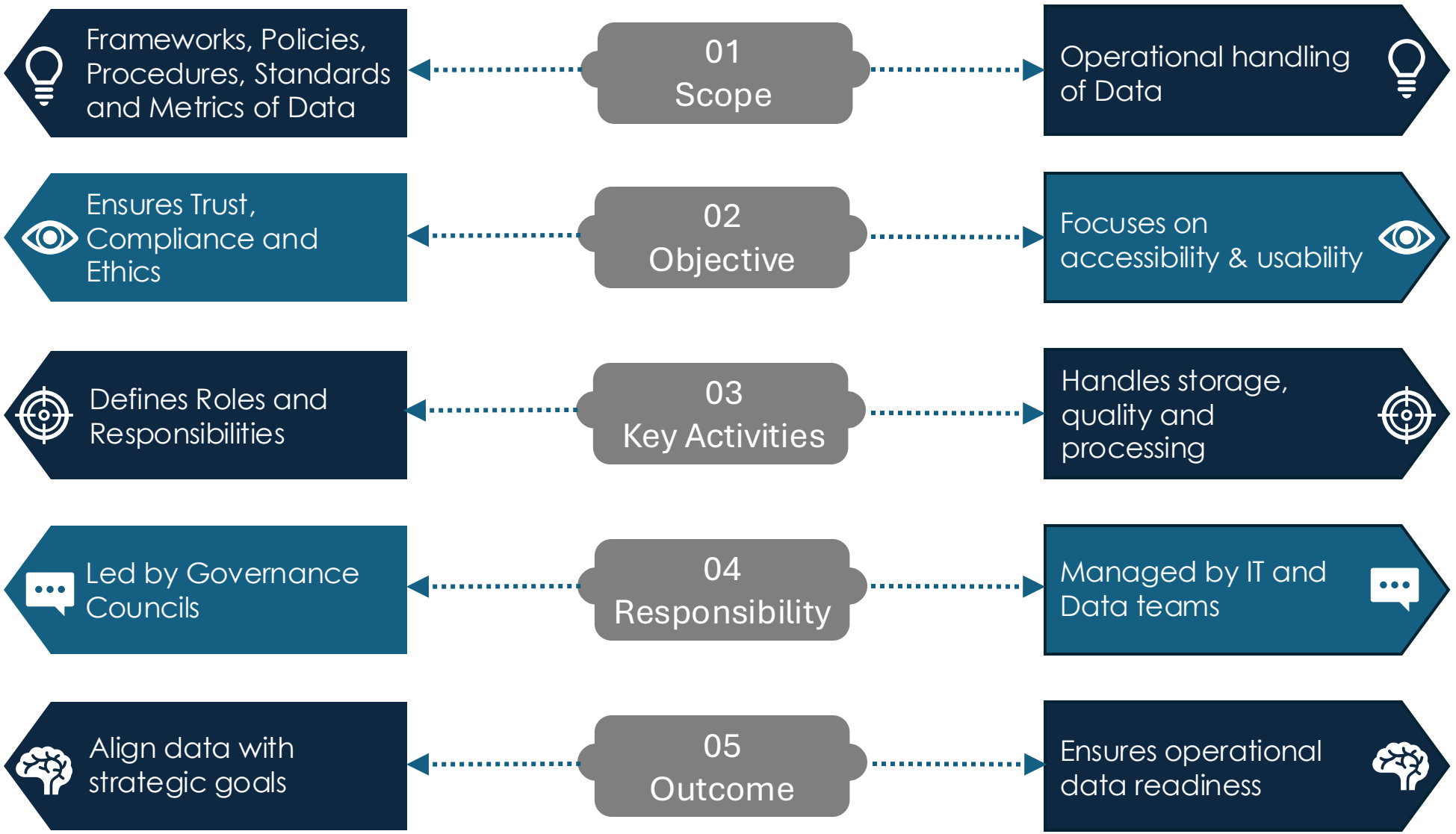
We ensure Risks are managed

From data security to privacy to Cloud and finally AI Governance, we ensure data is protected and used responsibly across their lifecycle

We Drive Culture Change and Data Literacy

We coach teams, shift culture, and make Data Governance practical.

Data Governance Vs Data Management

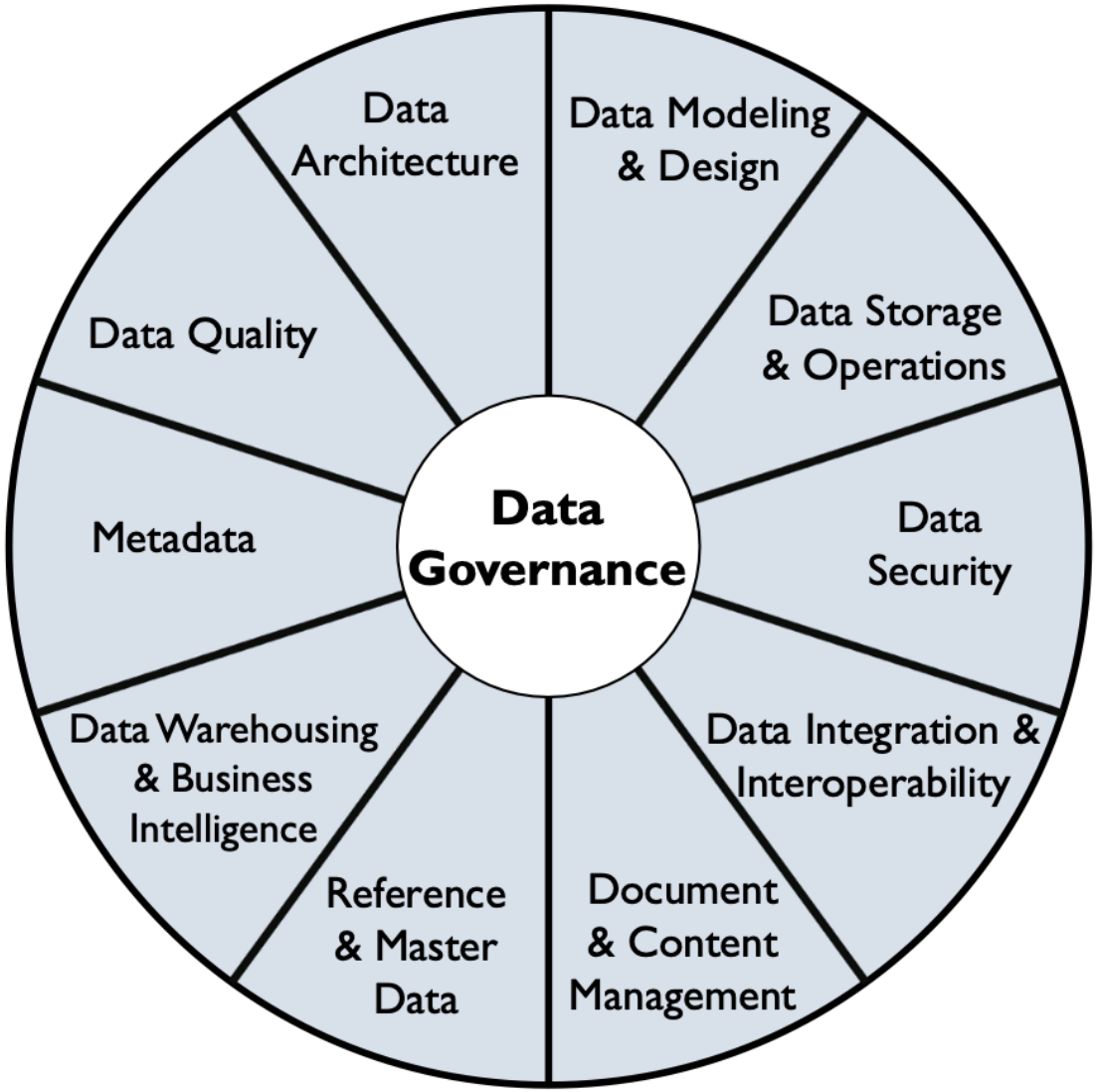


Comparison of Various Maturity Models Key Domains & Sub-Domains

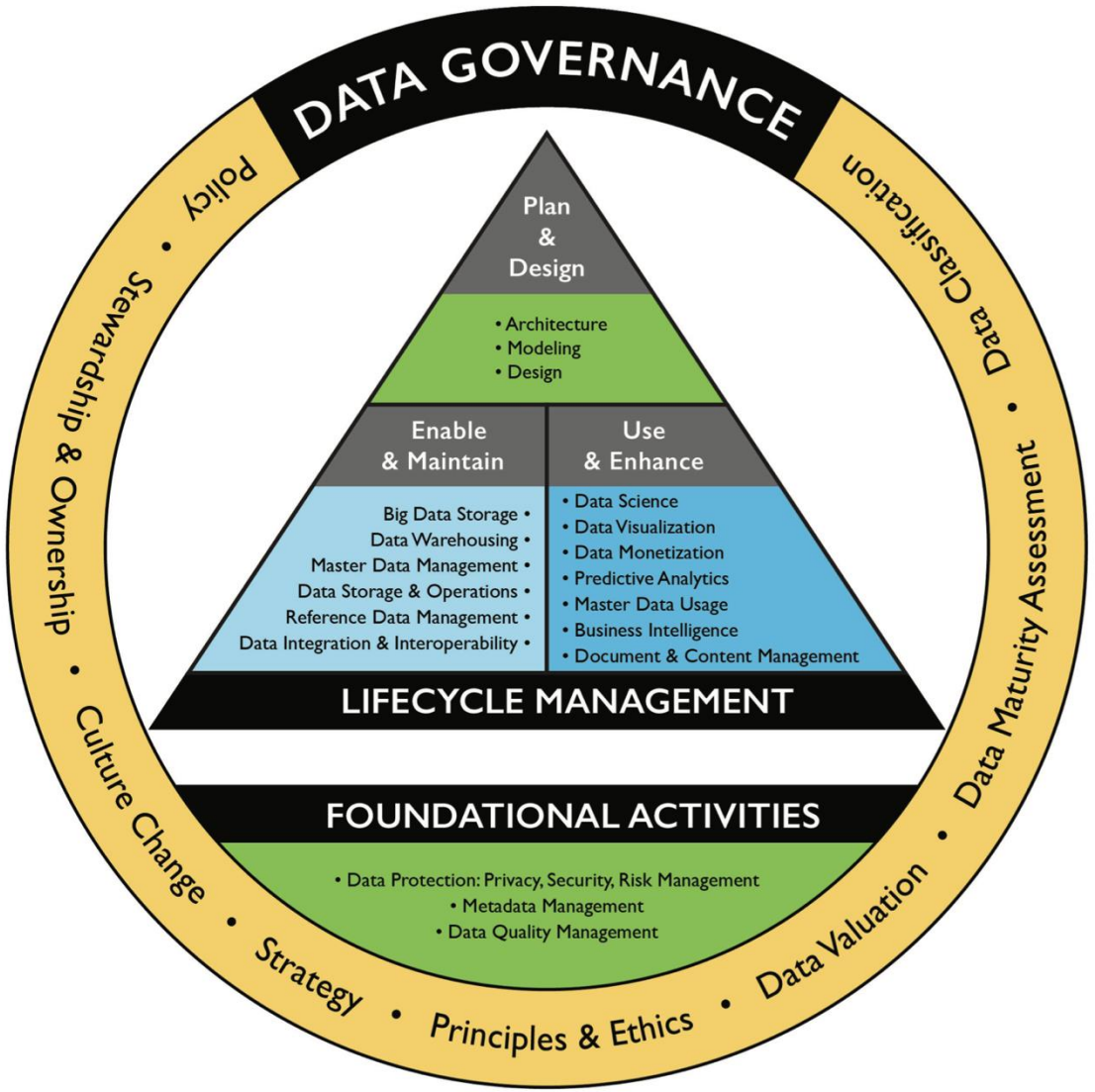
Model/ Key components to compare	DAMA DM-BOK2 (DAMA International)	DCAM V2 (EDM Council)	CMMI (ISACA)	IBM Data Governance Council Maturity Model (IBM)	Stanford Data Governance Maturity Model (Stanford Uni)	Gartner Enterprise Information Management Maturity Model (Gartner)	COBIT 4.1 (ISACA)	ISO-8000-61 (ISO)
Domain Type	Knowledge Area	Capability	Process	Competency	Process	Unknown	Control Objectives	Process
Key Domains & Sub-domains	1. Data Management	1. Data Management Strategy	1. Data Management Strategy	Supporting Disciplines	Foundation	1. Vision	1. Business requirements for Data Management	1. Data Quality
	2. Data Handling Ethics	2. Data Management Business Case	2. Data Governance	1. Data Architecture	1. Awareness	2. Strategy	2. Storage & Retention Arrangements	2. Data Related Support:
	3. Data Governance	3. Data Management Program	3. Data Quality	2. Classification & Metadata	2. Formalization	3. Metrics	3. Media Library Management System	2.1 Data Architecture Management
	4. Data Architecture	4. Data Governance	4. Data Operations	3. Audit Information Logging & Reporting	3. Metadata Project	4. Information Governance	4. Disposal	2.2 Data Transfer Management
	5. Data Modeling & Design	5. Data Architecture	5. Platform & Architecture		4. Stewardship	5. Organization and Roles	5. Backup & Restoration	2.3 Data Operations Management
	6. Data Storage & Operations	6. Technology Architecture	6. Measurement & Analysis	Core Principles	5. Data Quality	6. Information Lifecycle	6. Security Requirements for Data Management	2.4 Data Security Management
	7. Data Security	7. Data Quality	7. Process Management	4. Data Quality Management	6. Master Data	7. Enabling Infrastructure		3. Resource Provision:
	8. Data Integration & Interoperability	8. Data Control Environment	8. Process Quality Assurance	5. Information Lifecycle Management				3.1 Data Quality Organization Management
	9. Document & Content Management		9. Risk Management	6. Information Security & Privacy Enablers				3.2 Human Resource Management
	10. Reference & Master Data		10. Configuration Management	7. Organizational Structure & Awareness				
	11. Data Warehousing & Business Intelligence			8. Policy				
	12. Metadata Management			9. Stewardship Outcomes				
	13. Data Quality Management			10. Data Risk Management & Compliance				
	14. Big Data & Data Science			11. Value Creation				
	15. Data Management Maturity Assessment							
	16. Data Management Organization & Role Expectations							
	17. Data Management & Organizational Change Management							

DAMA International (DAMA DM-BOK)

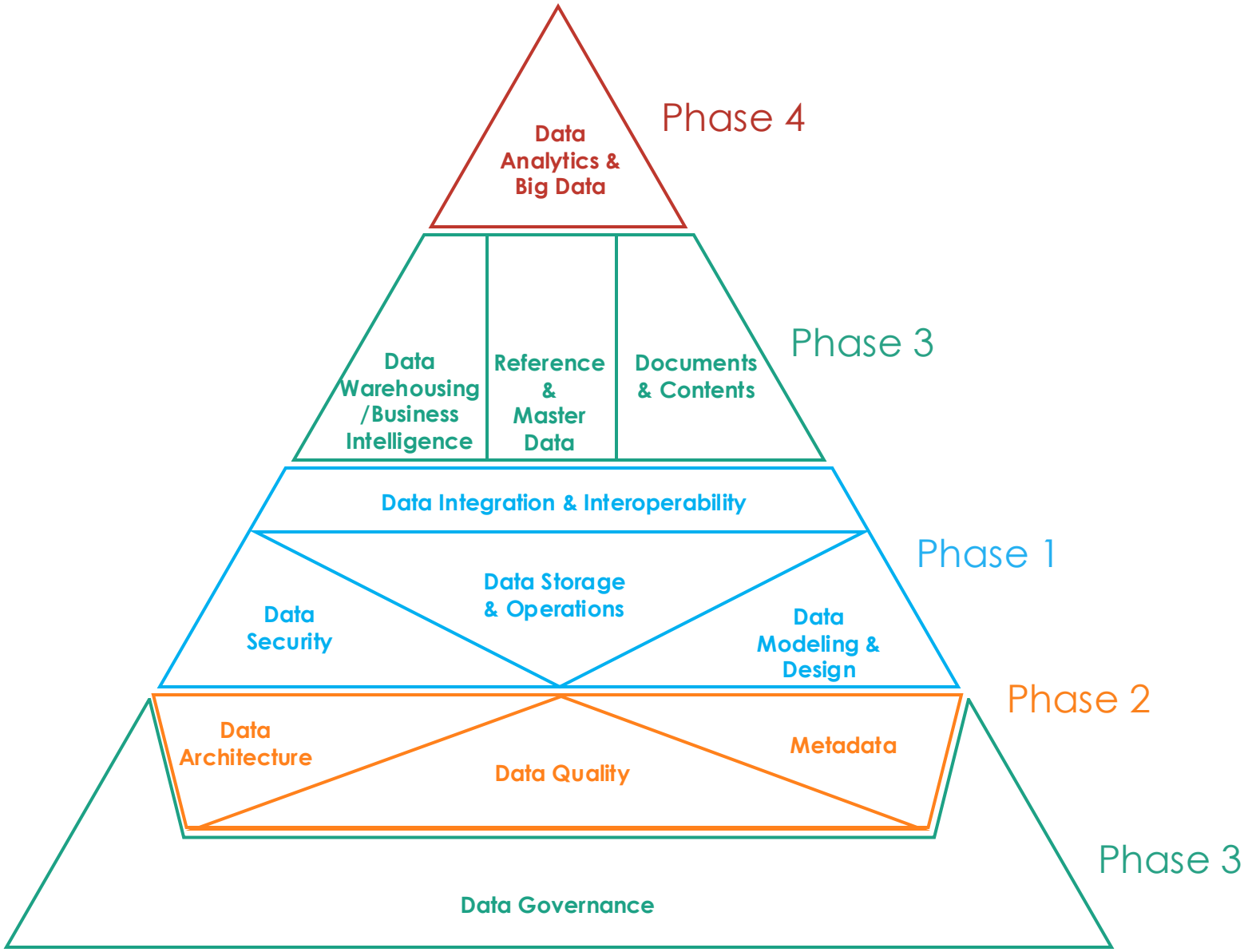
DAMA Wheel Version 1



DAMA Wheel Evolved



Peter Aiken's Pyramid



Phase 1: The organization purchases an application that includes database capabilities. This means the organization has a starting point for data modeling / design, data storage, and data security. To get the system functioning within their environment and with their data requires work on integration and interoperability.

Phase 2: Once they start using the application, they will find challenges with the quality of their data. But getting to higher quality data depends on reliable Metadata and consistent Data Architecture. These provide clarity on how data from different systems works together.

Phase 3: Disciplined practices for managing Data Quality, Metadata, and architecture require Data Governance that provides structural support for data management activities. Data Governance also enables the execution of strategic initiatives, such as Document and Content Management, Reference Data Management, Master Data Management, Data Warehousing, and Business Intelligence, fully enabling advanced practices within the golden pyramid.

Phase 4: The organization leverages the benefits of well-managed data and advances its analytic capabilities.

Data Management Principles

Effective Data Management requires Leadership commitment

Data is Valuable

- Data is an asset with unique properties
- The value of data can & should be expressed in economic terms

Data Management requirements are Business Requirements

- Managing data means managing the quality of data
- It takes metadata to manage data
- It takes planning to manage data
- Data management requirements must drive Information Technology decisions

Data Management depends on diverse skills

- Data management is cross-functional requiring range of skills & expertise
- Data management requires an enterprise perspective
- Data management must account for a range of perspectives

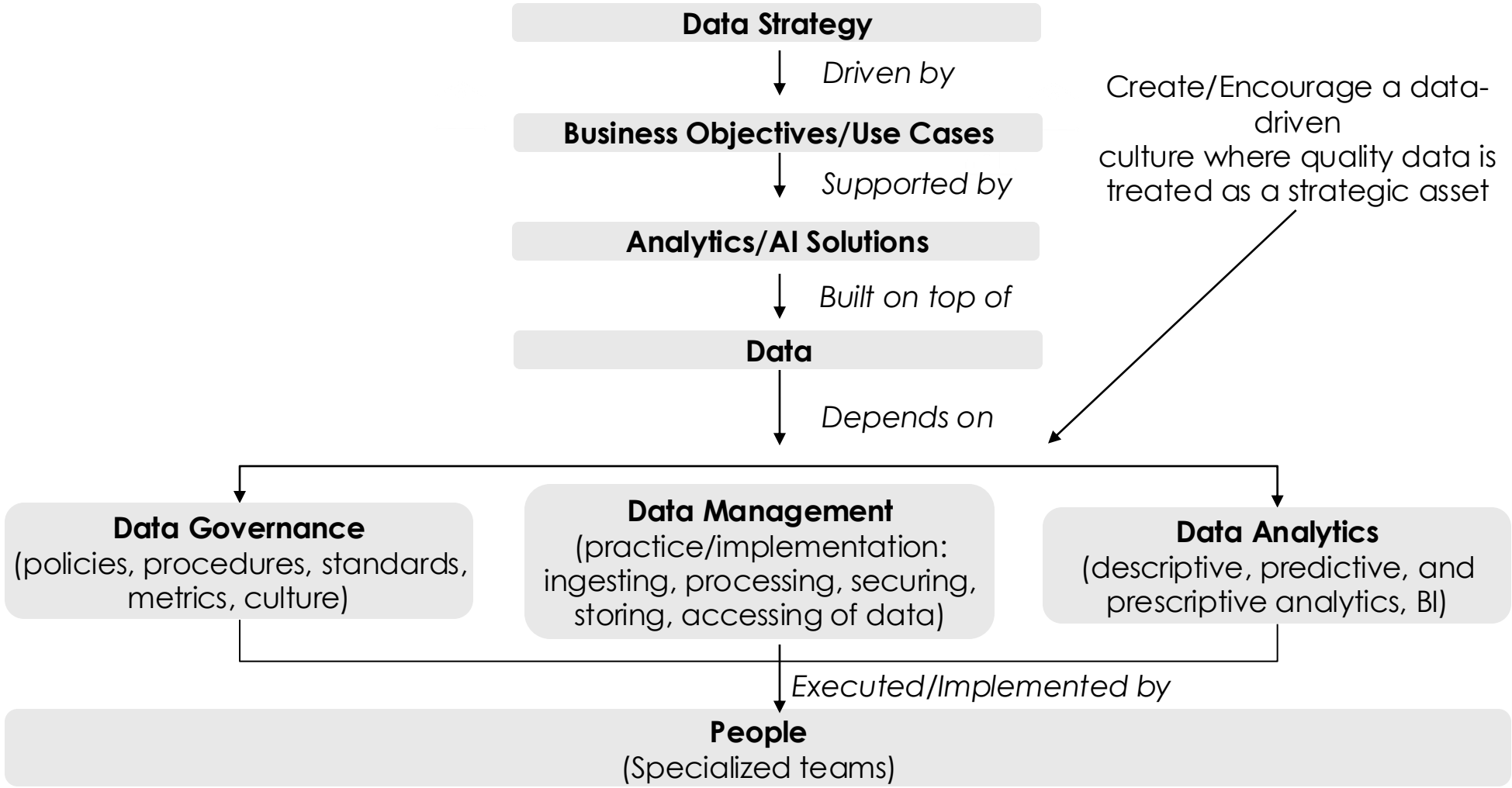
Data Management is Lifecycle Management

- Different types of data have different lifecycle characteristics
- Managing data includes managing the risks associated with data

Data Governance Pitfalls

- Insufficient Executive Sponsorship and Buy-in
- Lack of Clear Vision and Strategy for Data Governance
- Failure to Establish a Powerful Guiding Coalition
- Poor Communication of Data Governance Value and Progress
- Treating Data Governance as a Purely IT Initiative
- Overly Ambitious Scope and Lack of Incremental Wins
- Failure to Adapt and Evolve the Framework
- Focusing Solely on Technology Rather Than People and Process
- Insufficient Resources and Funding
- Lack of Clear Roles, Responsibilities, and Accountabilities
- Ignoring Organizational Culture and Resistance to Change

Data Governance Approach



Creating a Data Governance Plan (30-60-90 days plan)

30 days ----------> 60 days ----------> 90 days

Understand & Assess | **Establish** | **Improve**

Goal is to accelerate the learning process to make effective contribution faster.

Accelerate learning process to understand the goals, culture, information environment, key pain points.

- Understand short & long term goals
- Meet key internal stakeholders & obtain their confidence and buy-in
- Map high level information environment
- Create high level inventory of data sources
- Document main pain points from internal stakeholders
- High level data profiling of 1-3 key data sets
- Familiarize with existing business rules, definitions, standards, policies, procedures & other documentation
- Assists in building the business case for DG

Creating a Data Governance Plan (30-60-90 days plan)

30 days ----------> 60 days ----------> 90 days

Understand & Assess	Establish	Improve

Goal is to develop the framework for continuous support and success of data governance initiatives and identify opportunities for short term and long-term improvements.

Development of the Data Governance program's framework.

- Develop DG program charter, mission and scope
- Author DG Council's TORs, roles and responsibilities
- Establish data ownership, identify & appoint potential data stewards through data owners
- Create the DG Council and appoint members
- Create DSWG comprising of domain data stewards
- Author, framework(s), policies, procedures, standards & metrics
- Adopt a specific framework
- DG Council to decide on the first set of priorities
- Identify one key data set to focus on and short as well as long term goals
- Assess & obtain required resources

Creating a Data Governance Plan (30-60-90 days plan)

30 days ----------> 60 days ----------> 90 days

Understand & Assess	Establish	Improve

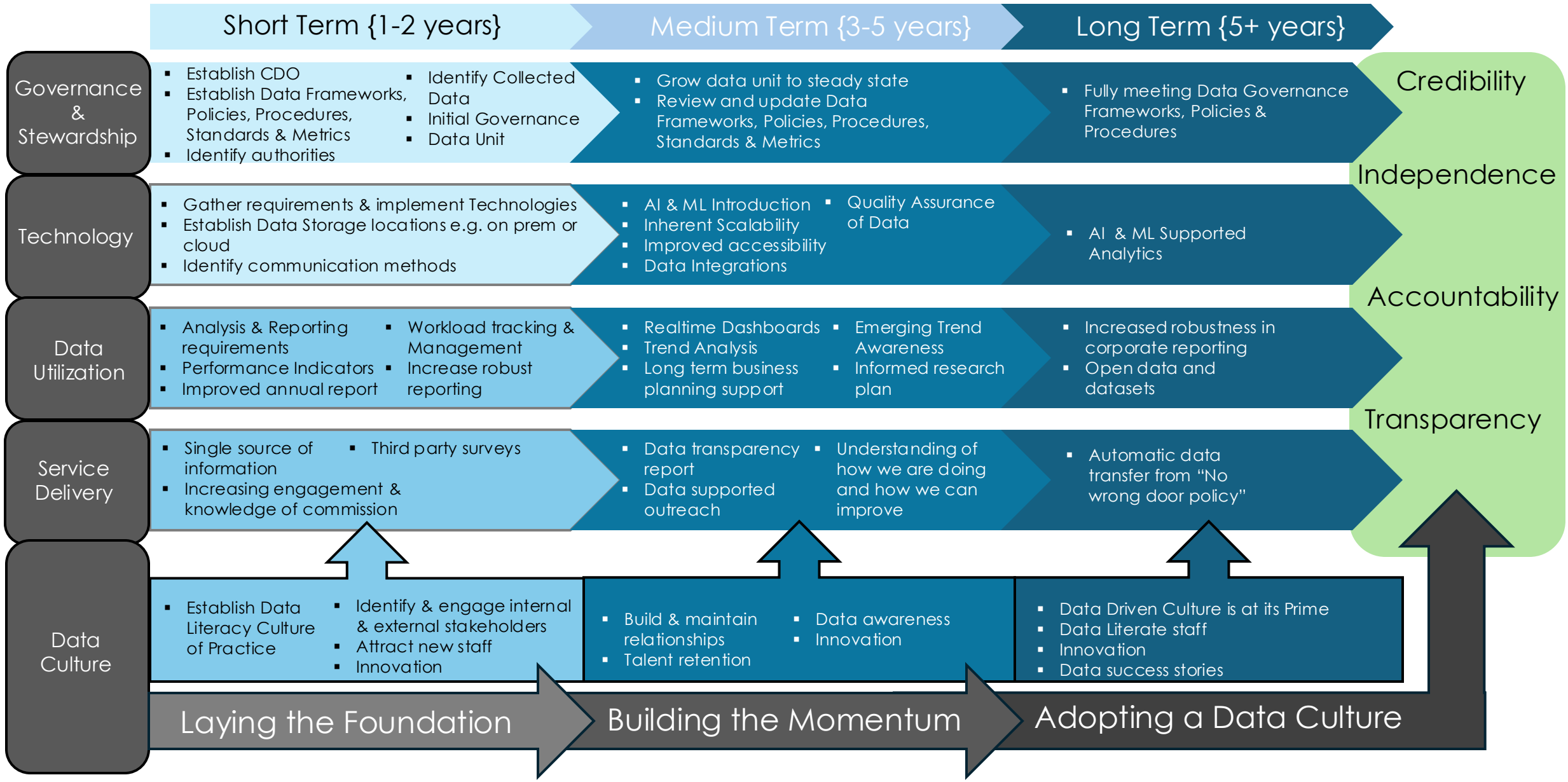
Goal is to make the one change that will have the biggest improvement impact & secure future adoption and buy-in.

Identify and analyze, fix and prevent data errors for one key data set.

- Develop change management plan
- Establish business rules & definitions
- Develop standards
- Assess data quality and measure baseline
- Assess business impact

- Identify root causes
- Develop improvement plan
- Fix and prevent errors
- Implement controls
- Present improvement and impact
- Communicate all actions and results
- Gather stakeholder feedback

Maturity Journey from 1-5 Years



Contacts

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