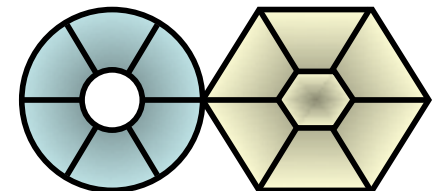


# **DAMA International's Data Management Body of Knowledge (DAMA-DMBOK®)**

## **Meta-data Management**

*Susan Earley  
Assistant Editor – DAMA DMBOK  
DAMA International*





## *Susan Earley*

**Susan Earley is a Sr. Data Architect for Sears Holdings. She has spent the last 20 years working in data management in various ways, starting with application development, data warehouse development and management, data modeling, and now into data architecture.**

**Susan contributed to the DAMA-DMBOK as Assistant Editor, collecting all written chapters, applying revisions due to commentary, filling in a few missing pieces, organizing all chapters to show a consistent structure and voice, and proof-reading the entire manuscript multiple times.**

**Susan is the editor for the recently-released DAMA Dictionary.**



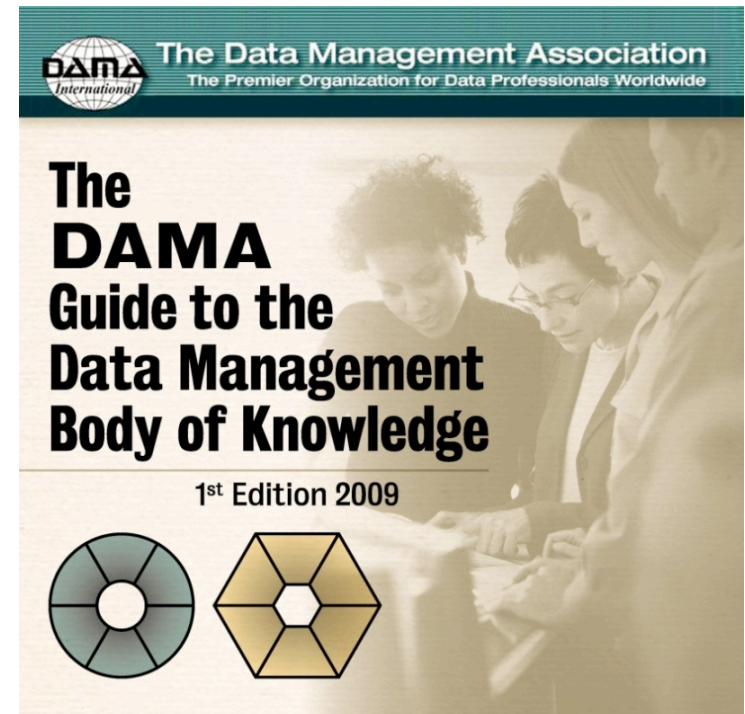
## *Agenda*

- DAMA-DMBOK® Guide Brief Overview**
- Chapter 9: Meta-data Management**
  - **Chapter Contents**
  - **Context Diagram Contents**
- Discussion**



# *The DAMA-DMBOK® Guide*

- ❑ **A Guide to the Data Management Body of Knowledge (DAMA-DMBOK®)**
  - Published by DAMA International
  - Sponsored by The DAMA Foundation
  - Written and edited by DAMA members
- ❑ **An integrated primer –A “definitive introduction”**
- ❑ **Modeled after other BOK documents:**
  - PMBOK (Project Management BOK)
  - SWEBOK (Software Engineering BOK)
  - CITBOK (Canadian IT BOK)

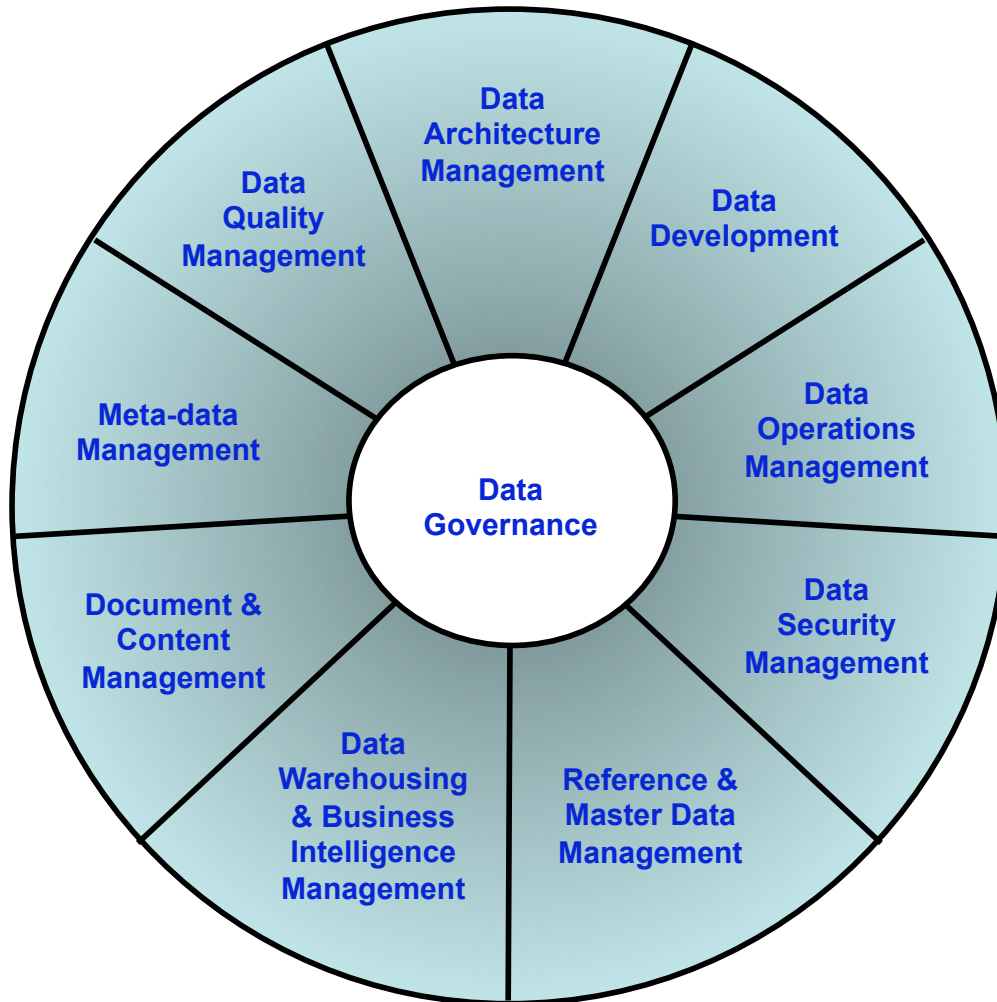


#### **Related documents:**

- ❑ **Download the DAMA-DMBOK Framework for free ([www.dama.org](http://www.dama.org))**
- ❑ **Purchase the new DAMA Dictionary of Data Management with over 2000 terms defined ([www.amazon.com](http://www.amazon.com))**



# ***DAMA-DMBOK® Guide*** ***Data Management Functions***



✚ **10 Functions**

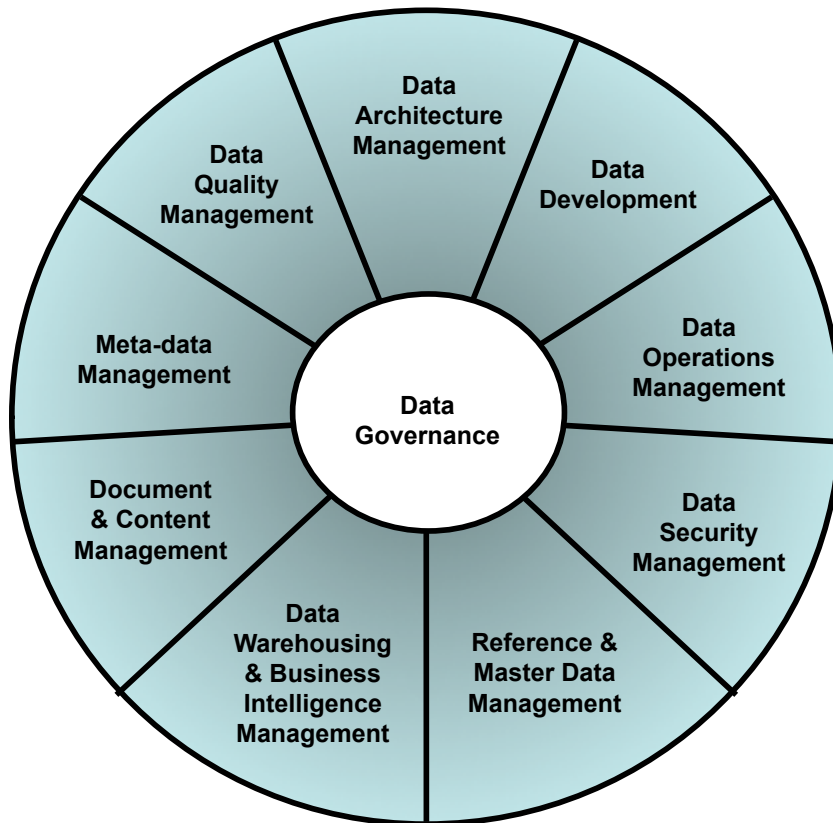
✚ **100+ Activities**

- ✚ **Planning Activities**
- ✚ **Control Activities**
- ✚ **Development Activities**
- ✚ **Operations Activities**



# ***DAMA-DMBOK® Guide Functions & Environment***

## ***Data Management Functions***



## ***Environmental Elements***





# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Chapter Contents***

- Introduction – What is the function?**
- Context Diagram – What is the scope of the function?**
- Concepts – What concepts are necessary to understand in order to understand the activities?**
- Activities – What are the function’s tasks? How does the function work?**
- Guiding Principles – What are the main points about this function?**
- Process Summary with Roles – For each activity, what is the primary deliverable, what roles are responsible, approving, and contributing to those deliverables?**
- Organizational Impacts – How is an organization impacted by this function?**
- Recommended Reading – What other publications reference this function?**
- What else should be included in the next version?**



# ***DAMA-DMBOK<sup>®</sup> Guide Context Diagram Contents***

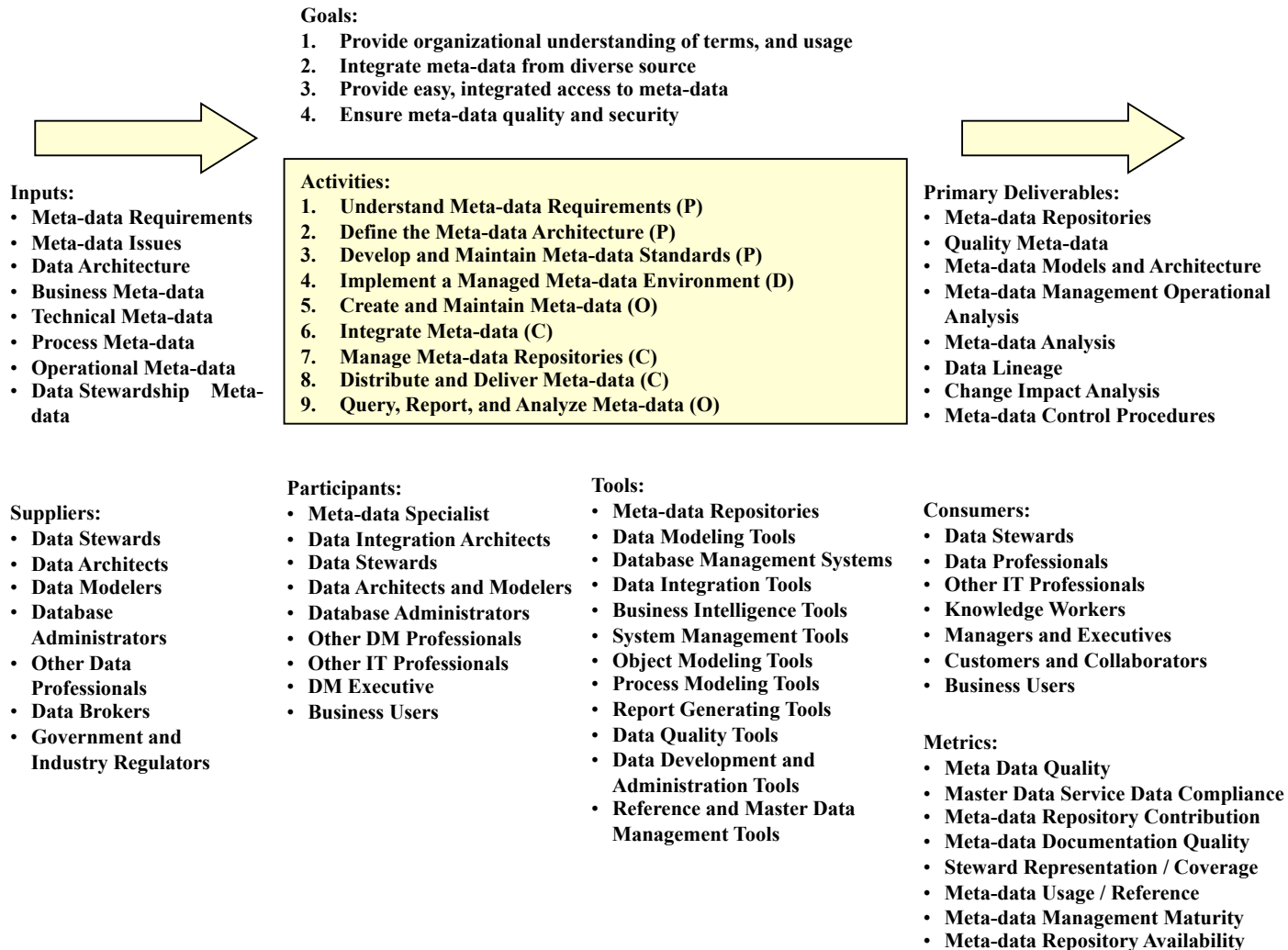
- Definition – What is the function?**
- Goals – What does the function accomplish? Why does the function exist?**
- Activities – What are the function’s tasks? How does the function work?**
- Inputs – What do the function’s tasks use?**
- Suppliers – Who provides the inputs to the function’s tasks?**
- Participants – Who is impacted by the function?**
- Tools – What tools do the function’s tasks use?**
- Primary Deliverables – What does the function deliver?**
- Consumers – Who uses the primary deliverables?**
- Metrics – How is the function is measured?**
  
- Note – no where, how, when**



# DAMA-DMBOK® Guide

## Meta-data Management Context Diagram

Definition: Planning, implementation, and control activities to enable easy access to high quality, integrated meta-data.



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



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Context Diagram: Definition & Goals***

### **Definition:**

**Planning, implementation, and control activities to enable easy access to high quality, integrated meta-data.**

### **Goals:**

- 1. Provide organizational understanding of terms, and usage**
- 2. Integrate meta-data from diverse source**
- 3. Provide easy, integrated access to meta-data**
- 4. Ensure meta-data quality and security**



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Chapter: Concepts***

- **Meta-data Definition**
  - **Types of Meta-data**
    - **Business**
    - **Technical and Operational**
    - **Process**
    - **Data Stewardship**
  - **Meta-data for Unstructured Data**
  - **Sources of Meta-data**
- **Meta-data History 1990 – 2008**
- **Meta-data Strategy**



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Context Diagram: Activities***

- 1. Understand Meta-data Requirements (P)**
- 2. Define the Meta-data Architecture (P)**
- 3. Develop and Maintain Meta-data Standards (P)**
- 4. Implement a Managed Meta-data Environment (D)**
- 5. Create and Maintain Meta-data (O)**
- 6. Integrate Meta-data (C)**
- 7. Manage Meta-data Repositories (C)**
- 8. Distribute and Deliver Meta-data (C)**
- 9. Query, Report, and Analyze Meta-data (O)**

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



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Context Diagram: Inputs***

- **Meta-data Requirements**
- **Meta-data Issues**
- **Data Architecture**
- **Business Meta-data**
- **Technical Meta-data**
- **Process Meta-data**
- **Operational Meta-data**
- **Data Stewardship Meta-data**



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Context Diagram: Suppliers***

- **Data Stewards**
- **Data Architects**
- **Data Modelers**
- **Database Administrators**
- **Other Data Professionals**
- **Data Brokers**
- **Government and Industry Regulators**



## ***DAMA-DMBOK<sup>®</sup> Guide***

### ***Context Diagram: Participants***

- **Meta-data Specialist**
- **Data Integration Architects**
- **Data Stewards**
- **Data Architects and Modelers**
- **Database Administrators**
- **Other DM Professionals**
- **Other IT Professionals**
- **DM Executive**
- **Business Users**



## ***DAMA-DMBOK<sup>®</sup> Guide***

### ***Context Diagram: Tools/Technology***

- **Meta-data Repositories**
- **Data Modeling Tools**
- **Database Management Systems**
- **Data Integration Tools**
- **Business Intelligence Tools**
- **System Management Tools**
- **Object Modeling Tools**
- **Process Modeling Tools**
- **Report Generating Tools**
- **Data Quality Tools**
- **Data Development and Administration Tools**
- **Reference and Master Data Management Tools**



## ***DAMA-DMBOK<sup>®</sup> Guide***

### ***Context Diagram: Primary Deliverables***

- **Meta-data Repositories**
- **Quality Meta-data**
- **Meta-data Models and Architecture**
- **Meta-data Management Operational Analysis**
- **Meta-data Analysis**
- **Data Lineage**
- **Change Impact Analysis**
- **Meta-data Control Procedures**



## ***DAMA-DMBOK<sup>®</sup> Guide***

### ***Context Diagram: Consumers***

- **Data Stewards**
- **Data Professionals**
- **Other IT Professionals**
- **Knowledge Workers**
- **Managers and Executives**
- **Customers and Collaborators**
- **Business Users**



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Context Diagram: Metrics***

- **Meta Data Quality**
- **Master Data Service Data Compliance**
- **Meta-data Repository Contribution**
- **Meta-data Documentation Quality**
- **Steward Representation / Coverage**
- **Meta-data Usage / Reference**
- **Meta-data Management Maturity**
- **Meta-data Repository Availability**



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Chapter: Guiding Principles***

- 1. Establish and maintain a meta-data strategy and appropriate policies, especially clear goals and objectives for meta-data management and usage.**
- 2. Secure sustained commitment, funding, and vocal support from senior management concerning meta-data management for the enterprise.**
- 3. Take an enterprise perspective to ensure future extensibility, but implement through iterative and incremental delivery.**
- 4. Develop a meta-data strategy before evaluating, purchasing, and installing meta-data management products.**
- 5. Create or adopt meta-data standards to ensure interoperability of meta-data across the enterprise.**
- 6. Ensure effective meta-data acquisition for both internal and external meta-data.**
- 7. Maximize user access, since a solution that is not accessed or is under-accessed will not show business value.**



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Chapter: Guiding Principles***

- 8. Understand and communicate the *necessity* of meta-data and the purpose of each type of meta-data; socialization of the value of meta-data will encourage business usage.**
- 9. Measure content and usage.**
- 10. Leverage XML, messaging, and Web services.**
- 11. Establish and maintain enterprise-wide business involvement in data stewardship, assigning accountability for meta-data.**
- 12. Define and monitor procedures and processes to ensure correct policy implementation.**
- 13. Include a focus on roles, staffing, standards, procedures, training, and metrics.**
- 14. Provide dedicated meta-data experts to the project and beyond.**
- 15. Certify meta-data quality.**



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Chapter: Process Summary***

- Any we missed?**
- Any we should remove?**
- Any we should emphasize over others?**
- Any other roles we should list?**



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Chapter: Organizational and Cultural Issues***

- Any we missed?**
- Any we should remove?**
- Any we should emphasize over others?**
- Any other impacts we should list?**
- Is the Q&A format effective?**



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Chapter: Recommended Reading***

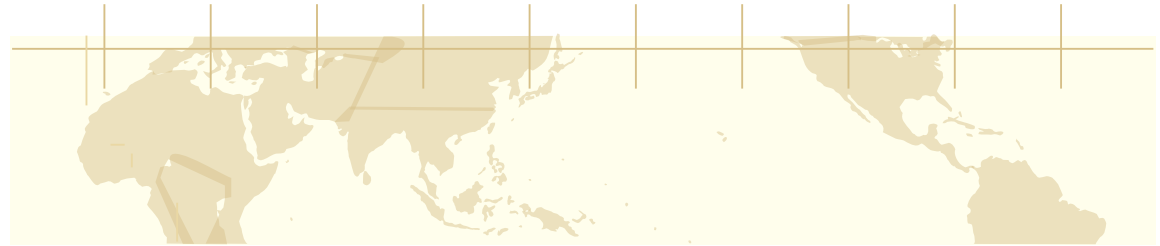
- Any we missed?**
- Any we should remove?**
- Any we should emphasize over others?**



# ***DAMA-DMBOK<sup>®</sup> Guide***

## ***Chapter: Practices & Techniques***

- Are there any specific to Meta-data Management?**
- Any we should emphasize over others?**



**Thank you for your  
feedback!**