* 1. **Types of Metadata, Uses and Sources**

**Types of Metadata – DAMA-DMBOK V2**

DAMA-DMBOK V2 defines metadata as **"data about data"**, categorized into **three main types**, each with its own **purpose** and **source**.

**1. Business Metadata**

**What it is**

Describes data from a **business perspective**, focusing on meaning, usage, and ownership.

**Uses**

* Promotes **common understanding** across departments
* Helps in **data stewardship**, governance, and compliance
* Aids in **reporting and decision-making** by business users

**Examples**

* Business terms and definitions (e.g., "Customer," "Premium")
* Data owners and stewards
* Policies and rules (e.g., data classification, access rules)
* Data usage context and descriptions

**Sources**

* Business glossaries
* Policy documents
* Data governance tools
* Interviews with subject matter experts

**2. Technical Metadata**

**What it is**

Describes the **structure and design** of data within systems.

**Uses**

* Supports **data integration** and **ETL development**
* Enables **impact analysis** and **lineage tracking**
* Facilitates **system documentation** and troubleshooting

**Examples**

* Database schemas (tables, columns, data types)
* Source-to-target mappings in ETL processes
* Primary/foreign key relationships
* Indexes and partitioning

**Sources**

* Databases and data warehouses
* ETL tools (e.g., Informatica, Talend)
* Data modeling tools (e.g., ER/Studio, Erwin)
* APIs and code repositories

**3. Operational Metadata**

**What it is**

Describes **how data moves**, changes, and is used during processing.

**Uses**

* Tracks **data lineage and flow**
* Supports **monitoring, auditing, and compliance**
* Enables **data lifecycle management**

**Examples**

* Job schedules and data refresh times
* Data movement logs
* Execution logs and error messages
* Access history and audit trails

**Sources**

* ETL and data integration logs
* Workflow management tools
* Monitoring and audit systems
* System metadata repositories

**Summary Table**

| **Metadata Type** | **Purpose / Use** | **Common Sources** |
| --- | --- | --- |
| **Business Metadata** | Provides context, definitions, ownership | Glossaries, policy docs, governance tools |
| **Technical Metadata** | Describes structure and design of data | Databases, ETL tools, modeling software |
| **Operational Metadata** | Captures movement, usage, and performance of data | Logs, schedulers, monitoring systems |